# Louisville Metro Air Pollution Control District 850 Barret Ave., Louisville, Kentucky 40204 08 19 2014

# **Title V Statement of Basis**

Company: Rohm and	l Haas – Louisville Pla	nt			
Plant Location: 4300	Camp Ground Road,	Louisville, KY 40216			
<b>Date Application Re</b>	<b>ceived:</b> 22 April 1997 29 August 201	<b>Application Number:</b> 1	10592 32297		
Public Comment Da District Engineer: D	06/28/2014	-	<b>Proposed Permit Date:</b> 05 12 2014 06/28/2014 <b>Permit No:</b> 157-97-TV(R3)		
<b>Plant ID:</b> 189	<b>SIC Code:</b> 2821	<b>NAICS</b> : 325211	<b>AFS:</b> 00189		
Federal Regulations purpose is to identify	Part 70, and (3) Title and consolidate existin	District Regulation 2.16, (2) To V of the Clean Air Act Ame g District and Federal air requires with these requirements.	ndments of 1990. Its		
monoxide (CO), 1 hr	and 8 hr ozone (O <sub>3</sub> ), ar area for particulate	ent area for lead (Pb), nitrogen of diparticulate matter less than 10 matter less than 2.5 microns	) microns ( $PM_{10}$ ); and		
Application Type/Pe	ermit Activity:				
[ ] Initial Issuance					
<ul><li>[ ] Permit Revision</li><li>[ ] Administrative</li><li>[ ] Minor</li><li>[ ] Significant</li></ul>					
[X] Permit Renewal					
Compliance Summa	ry:				
[X] Compliance certif	_	[ ] Compliance schedule inclu [X] Source is operating in com			

Permit No: 157-97-TV(R3) Plant ID: 189

## I. Source Information

- 1. **Product/Process Description:** The source produces various coatings and resins.
- **2. Process Description:** The source produces various coatings and resins. The source produces steam for plant-wide use with gas-fired and liquid waste-fired boilers.
- **3. Site Determination:** There are no other facilities that are contiguous or adjacent and under common control.
- 4. Emission Unit Summary:

## A. KAC PRODUCTION UNIT: Production of coatings and resins

- i. U-KAC-Tanks1 Emission Unit
- ii. U-KAC-Tanks2 Emission Unit
- iii. U-KAC-Tanks3 Emission Unit
- iv. U-KAC-Tanks4 Emission Unit
- v. U-KAC-Reactor Emission Unit
- vi. U-KAC-Load Emission Unit
- vii. U-KAC-Powder Emission Unit
- viii. U-KAC-DryPack Emission Unit
- ix. U-KAC-Misc Emission Unit
- x. U-KAC-D-PKG Emission Unit

## B. KB PRODUCTION UNIT: Methyl Methacrylate Distillation

- i. U-KB-Columns+ Emission Unit
- ii. U-KB-Tanks1 Emission Unit
- C. **KVK PRODUCTION UNIT: Plastic Additives**Error! Bookmark not defined.
  - i. U-KVK-Tanks1 Emission Unit
  - ii. U-KVK-Tanks2 Emission Unit
  - iii. U-KVK-G&HReact Emission Unit
  - iv. U-KVK-Misc Emission Unit

#### D. KV-1 PRODUCTION UNIT: Plastic Additives

- i. U-KV1-Feed1 Emission Unit
- ii. U-KV1-Feed2 Emission Unit
- iii. U-KV1-Pack Emission Unit

## E. KVP-2 PRODUCTION UNIT: Plastic Additives Pelletizing System

- i. U-KVP2-PELL Emission Unit
- ii. U-KVP2-PKG Emission Unit

## F. KV-2 PRODUCTION UNIT: Plastic Additives

- i. U-KV2-Feed Emission Unit
- ii. U-KV2-Dryer Emission Unit
- iii. U-KV2-50#bag Emission Unit

# G. KV-PA PRODUCTION UNIT: Plastic Additives

i. U-KVPA-Feed Emission Unit

ii. U-KVPA-Dry Emission Unit

iii. U-KVPA-Pack Emission Unit

# H. PLANT MISCELLANEOUS PRODUCTION UNIT: Miscellaneous

**U-PLANT-Misc Emission Unit** 

## I. UTILITIES PRODUCTION UNIT: Utilities

i. U-UTIL-Steam Emission Unit

ii. U-UTIL-WW Emission Unit

j. IA1: Cold Cleaners group

k. **IA2: Existing Emergency Generators** 

1. **IA3: New Emergency Engines** 

#### 5. Permit Revisions

Revision No.	Date or Reissuance	Public Notice Date	Type	<b>Emission Unit</b>	Description
Initial	02/28/2007	09/03/2006	Initial	Entire Permit	Notes 1, 2, 3
R1	03/30/2009	N/A	Admin	U-UTIL	Incorporate Construction Permits 254-05-C(R1), 522-07-C, and 525-08-C
R2	07/21/2011	05/18/2011	Admin	Entire Permit	Notes 4, 5
R3	08/19/2014	05/12/2014	Renewal	Entire Permit	5 year Renewal; incorporate STAR TAC requirements, construction permits 523-07-C(R1), 449-90-C(R2), 105-09-C, 32-10-C, 378-06-C(R1), 31532-11-C, 31533-11-C, and 31534-11-C, include repurposed tanks. Notes 6, 7, 8, 9, 10
		6/28/2014	Significant	U-KAC-DryPack, page 57 and U-KAC-D-PKG, page 71	The Duration of the Method 9 test was changed from 3 hours to 30 minutes.
			Admin	1) U-KVP2-PELL, S.2.a.iii.; 2) U-KV2-50#bag, Equipment	Clarification of the monitoring requirement for the VOC concentration;     Corrected the Equipment Description

Revision No.	Date or Reissuance	Public Notice Date	Type	<b>Emission Unit</b>	Description
				Description, Standards, Reporting and SOB	of the process collector. Corrected the description in all the related standards, monitoring/record keeping, reporting requirements, and comments. Corrected the PM standard for the emission points 03-571 and 03-572 to match construction permit 35996-12-C; and updated SOB to match the PM lb/hr standard

#### Notes:

- 1) The District incorrectly changed some limits for Boiler 100. These limits have been changed back to match the draft Title V and Construction Permit 449-90-C, dated February 13, 2002.
- The District made the changes indicated in the response to comments that were inadvertently missed.
- 3) The District corrected some additional typographical errors.
- 4) The District removed equipment permanently taken out of service on the following dates. The District also corrected additional typographical errors.
  - 03/24/2009: U-KU-Misc- (06-416 and 06-531), U-KU-Storage4- (08-500, 08-510, 08-520, 08-530, 08-540, 08-550, 08-560, 08-570, 08-580, 08-590, 08-660, 08-665, 08-670, 08-675, 08-680, 08-685) and U-KVK-Tanks1-03-105
  - 06/30/2009: U-KV3-Dryer System- (17-300, 17-330, 17-250, 17-256, 17-116, 17-477, 17-235), U-KV3-Misc-17-150, U-KV3-Tanks1- (17-200, 17-272, 17-478, 17-155, 17-158, 17-205, 17-240, 17-241 and 17-262), U-KV3-Misc- (17-220, 17-221, 17-224, 17-376, 17-390, 17-392, 17-462, 17-Pkg, 17-S&G), U-KV3-Tanks2- (17-185 and 17-246), U-KVK-E&FReact- (05-500, 05-508, 05-510, 05-515, 05-518 and 05-546), U-KVK-Misc- (05-501, 05-520, 05-523, 05-524, 05-533, 05-542, 05-545 and 05-562)
  - 10/06/2009: U-KB-Columns+- (03-762), U-KU-Load-05-479, U-KU-Storage1-05-402, U-KU-Storage2-66-172, U-KU-Storage4-08-355, U-KU-MISC- (03-233, 05-135 and 05-181), U-KU-Storage1- (05-140, 05-150, 05-405, 05-410, 05-415, 05-420, 05-425, 05-430, 05-452, 05-458, 05-467, 05-471, 05-473, 05-475 and 05-477), U-KU-Storage2- (05-121, 05-215, 05-217, 05-220, 06-533, 06-645, 08-260, 08-262, 08-264 and 08-266), U-KU-Storage3- (08-400, 08-401, 08-402, 08-403 and 08-404), U-KU-Storage5- (05-202 and 08-200), U-KU-Storage6- (08-204, 08-230, 08-231, 08-232, 08-233, 08-234, 08-235, 08-236, 08-237, 08-238, 08-239, 08-244, 08-245, 08-246, 08-247, 08-248, 08-249, 08-250, 08-251, 08-252, 08-253, 08-258, 08-259, 08-261, 08-263, 08-265 and 08-267), and U-KU-Storage7- (05-155, 06-150, 08-350, 08-351, 08-352, 08-353, 08-354, 08-470, 08-471 and 08-472)
  - 02/01/2010: U-KU-Load- (07-100, 07-110), U-KU-Misc- (03-715, 05-191, 05-334, 05-346, 05-349, 06-290, 06-438, 06-459, 06-500, 06-510, 05-561, 06-570, 06-610, 08-220, 08-227, 58-175, 66-170, Drum, Used Drum), U-KU-Reactors- (05-255, 05-266), U-KU-Storage1- (05-230, 05-402, 05-450, 05-454, 05-456, 05-465, 05-469, 06-306), U-KU-Storage2- (05-226, 05-245, 06-307, 06-424, 08-205), U-KU-Storage5- (05-175, 05-204, 06-224), U-KU-Storage6- (05-124, 05-207, 06-536), U-KU-Storage8- (05-240, 05-250, 05-275, 05-280, 05-310, 05-320, 05-330, 06-401, 06-403, 06-431, 06-433, 06-518, 06-521, 06-528, 06-530, 06-540, 06-550, 08-222), U-KV3R-Tanks1- (17-650, 17-802, 17-803, 17-805, 17-820, 17-825, 17-869, 17-920), U-KV3R-Tanks2- (17-365, 17-870,

- 17-930), U-KV3R-Tanks3- (17-625, 17-647, 17-655, 17-665, 17-670, 17-705, 17-875, 17-880)
- 07/01/2010: U-KV3R-I&JReac- (17-601, 17-900, 17-630, 17-860, 17-855, BD Area, Rail), U-KV3R-Tanks2-17-721, U-KU-Misc- (06-361, 06-364), U-KU-Reactors- (05-128, 05-232, 05-285, 05-290, 05-300, 05-305, 06-300, 06-330, 06-400, 06-430), and U-KU-Storage5-05-120
- 5) Appendix B removed as company is no longer subject to 40 CFR 63 Subpart JJJ, per 40 CFR 63.1310(f)(9) per company letter from March 8, 2010 stating that the company did not anticipate making any thermoplastic products in the future.
- 6) The District removed the following equipment that was deemed trivial activities: U-KAC-Powder-14-593, U-KAC-D-PKG-KACD-vac, U-KV1-Dryer-05-770, U-KV2-Dryer-03-392, U-KVPA-Dry-09-650, and U-KVP2-PKG-11-272.
- 7) The District removed the following equipment permanently taken out of service:
  - 10/06/2011: U-KAC-DryPack- (14-295, 14-337), U-KAC-Tanks2-14-660, U-KAC-Tanks4- (14-116, 14-119), U-KV3R-Tanks1-03-156, U-KV3-Tanks1- (17-100, 17-103, 17-105), U-KV3-Tanks2- (17-135, 17-136)
  - 02/22/2013: U-KV1-Dryer- (05-570, 05-600, 05-740, 05-770) and U-KV1-Pack-Bag
  - 05/08/2013: U-KVP1-PELL- (05-776 and 05-781)
  - 01/31/2014: U-PLANT-Misc- (Print 1, Print 2, Print 5, Print 6), and U-KU-Storage3-17-530
  - 03/06/2014: U-PPLANT-Misc (Print 3, Print 4, Print 7, Print 8), U-KV2-50#bag 03-570, and U-KVK-Misc (66-510 and 66-513)
  - 03/26/2014: U-KB-Tanks1 (03-800 and 03-940)
- 8) The following tanks were repurposed and put back into service: U-KVK-Tanks2- (05-450, 05-452, 05-454, 05-456, 05-458, 05-465, 05-467, 05-469, 05-471, 05-473, 05-475, 05-477.
- 9) The following tanks were moved to different emission units:
  - 05-692 from U-KV1-Feed2 to U-KVPA-Feed
  - 05-670 from KV1-Dryer to KV1-Feed1, there are no emission points left in KV1-Dryer and the entire emission unit has been removed from the Title V Permit
- 10) Appendix A now includes CAM requirements. Three additional appendices have been added to the permit: Appendix D, Protocol for Performance Test; Appendix E, Regulation 7.25 VOC Emission Points that do not have a BACT Analysis; and Appendix F, Control Device Efficiencies and Determination Methods.
- **Fugitive Sources:** Fugitive emissions of dust from any part of the plant are subject to Regulation 1.14, *Control of Fugitive Particulate Emissions*.

#### 7. Plant-wide Emission Summary:

Pollutant	District Calculated Actual Emissions 2012 Data (tpy)	Major Source Status (based on PTE)
СО	15.74	Yes
NO <sub>x</sub>	169.41	Yes
$SO_2$	36.26	Yes
PM/PM <sub>10</sub>	8.40/6.14	Yes
VOC	14.95	Yes
Methyl methacrylate	4.85	Yes*

Pollutant	District Calculated Actual Emissions 2012 Data (tpy)	Major Source Status (based on PTE)
Styrene	0.18	Yes*
Toluene	2.99	Yes*
Total HAPs	9.56	Yes*
GHG	257,246	Yes**

<sup>\*</sup>Note: The source accepted limits on single and total HAP emissions in order to be a synthetic minor source on October 31, 2005; before this date the source was major. \*\*Note: The GHG are potential to emit (PTE) emissions not actual emissions.

# 8. Applicable Requirements:

[X] PSD	[X] Part 60	[X] SIP	[X] Part 63
[X] NSR	[X] Part 61	[X] District-Origin	[X] Other

# 9. MACT Requirements:

This source was major for HAPs before October 31, 2005 and is subject to the following MACT regulations:

40 CFR 63 Subpart DD National Emission Standards for Hazardous Air Pollutants from Off-Site Waste and
Air Pollutants from Off-Site Waste and
7 III 1 officiality from off Site waste and
Recovery Operations
40 CFR 63 Subpart OO National Emission Standards for Tanks -
Level 1
40 CFR 63 Subpart PP National Emission Standards for Containers
40 CFR 63 Subpart EEE National Emission Standards for Hazardous
Air Pollutants from Hazardous Waste
Combustors
40 CFR 63 Subpart ZZZZ National Emission Standards for Hazardous
Air Pollutants for Stationary Reciprocating
Internal Combustion Engines
40 CFR 63 Subpart CCCCCC National Emission Standards for Hazardous
Air Pollutants for Source Category: Gasoline
Dispensing Facilities

# 10. Referenced non-MACT Federal Regulations in Permit:

40 CFR 60 Subpart A	General Provisions
40 CFR 60 Subpart Db	Standards of Performance for Industrial
	Commercial-Institutional Steam Generating
	Units
40 CFR 60 Subpart Kb	Standards of Performance for Volatile
	Organic Liquid Storage Vessels (including
	Petroleum Liquid Storage Vessels) for
	Which Construction, Reconstruction, or
	Modification Commenced after July 23,
	1984

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40 CFR 60 Subpart IIII Standards of Performance for Stationary

Compression Ignition Internal Combustion

Engines

40 CFR 61 Subpart V National Emission Standards for Equipment

Leaks (Fugitive Emission Sources)

40 CFR 64 Compliance Assurance Monitoring for Major

**Stationary Sources** 

40 CFR 68 Subparts A through H Chemical Accident Prevention Provisions

40 CFR 80, Subpart I Motor Vehicle Diesel Fuel; Nonroad,

Locomotive, and Marine Diesel Fuel; and

ECA Marine Fuel

40 CFR 89, Subpart B Emission Standards and Certification

**Provisions** 

40 CFR 1039, Subpart B Emission Standards and Related

Requirements

## II. Regulatory Analysis

**1. Acid Rain Requirements:** The source is not subject to the Acid Rain Program.

- 2. Stratospheric Ozone Protection Requirements: Title VI of the CAAA regulates ozone depleting substances and requires a phase-out of their use. This rule applies to any facility that manufactures, sells, distributes, or otherwise uses any of the listed chemicals. This source does not manufacture, sell, or distribute any of the listed chemicals. The source's use of listed chemicals is that in fire extinguishers, chillers, air conditioners and other HVAC equipment.
- 3. Prevention of Accidental Releases 112(r): The source does not manufacture, process, use, store, or otherwise handle one or more of the regulated substances listed in 40 CFR Part 68, Subpart F, and District Regulation 5.15, Chemical Accident Prevention Provisions, in a quantity in excess of the corresponding specified threshold amount. If the source becomes subject to 40 CFR 68 and Regulation 5.15, the source shall comply with the Risk Management Program and Regulation 5.15 and submit a Risk Management Plan to:

RMP Reporting Center P.O. Box 3346 Merrifield, VA 22116-3346

**4. 40 CFR Part 64 Applicability Determination:** The source is major for VOC and a control device is needed to achieve compliance with District Regulation 7.25 for Emission Points E-KV2-03-330, E-KB-03-810, and E-KVPA-09-125. In accordance with 40 CFR 64, Compliance Assurance Monitoring for Major Stationary Sources, the source was required to propose a CAM plan for VOC, based on current process and control device requirements and practices. The revised CAM plan was received by the District on April 17, 2014.

# 5. Basis of Regulation Applicability

a. **Plant-wide** 

Rohm & Haas is a major source for CO,  $NO_x$ ,  $SO_2$ ,  $PM/PM_{10}$ , VOC, methyl methacrylate, styrene, toluene, combined HAPs, and  $CO_{2e}$  (Greenhouse Gases). Regulation 2.16-*Title V Operating Permits* establishes requirements for major sources.

The following HAP emission limits were taken to avoid applicability of 40 CFR 63 Subpart FFFF Miscellaneous Organic NESHAP (MON). The limits will assure that the source remains a synthetic minor source for HAPs.

The source shall limit each single plantwide HAP emissions to less than 10 tons per 12 consecutive month period and less than 2.6 tons per month.

The owner or operator shall limit the total plantwide HAP emissions to less than 25 tons per 12 consecutive month period and less than 6.5 tons per month.

Regulations 5.00, 5.01, 5.20, 5.21, 5.22 and 5.23 (STAR Program) establishes requirements for environmental acceptability of toxic air contaminants (TACs) and the requirement to comply with all applicable emission standards.

The TAC emissions from the combustion of natural gas are considered to be "de minimis emissions" by the District. This includes all of the emissions from a process or process equipment for which the only emissions are the products of combustion of natural gas, such as from a natural gas-fired boiler or turbine, but does not include the other emissions from a process or process equipment that are not the products of the combustion of natural gas. (Regulation 5.21, section 2.7)

The District determined on March 13, 2013 that potential TAC emissions were either de minimis or compliant with STAR EA goals yielding a cumulative maximum cancer risk of 2.6.

Regulation 2.16, sections 4.1.9.1 and 4.1.9.2 requires sufficient monitoring and record keeping to assure ongoing compliance with the terms and conditions of the permit. The owner or operator shall maintain all the required records for a minimum of 5 years and make the records readily available to the District upon request.

Regulation 2.16, section 4.3.5, requires stationary sources for which a Title V is issued shall submit an annual compliance certification by April 15. In addition, as required by Regulation 2.16, section 4.1.9.3, the source shall submit compliance reports at least every six months to show compliance with the permit. Compliance reports and compliance certifications shall be signed by a responsible official and shall include a certification statement per Regulation 2.16, section 3.5.11.

Regulation 2.16, section 4.3.1 establishes testing requirements to assure compliance with the terms and conditions of the permit. Thus, an EPA Reference Method performance test shall be performed every 10 years to determine the emission rate and control efficiency.

# b. **Applicable Regulations:**

Regulation	Title	Type
1.05	Compliance with Emission Standards and Maintenance Requirements	SIP
2.01	General Application	SIP
2.02	Air Pollution Regulation Requirements and Exemptions	SIP
2.03	Authorization to Construct or Operate; Demolition/Renovation Notices and Permit Requirements	SIP
2.04	Construction or Modification or Major Sources In or Impacting Upon Non-Attainment Areas (Emission Offset Requirements)	SIP
2.05	Prevention of Significant Deterioration of Air Quality	SIP
2.07	Public Notification for Title V, PSD, and Offset Permits; SIP Revisions; and Use of Emission Reduction Credits	SIP
2.08	Emissions Fees, Permit Fees, Permit Renewal Procedures, and Additional Program Fees	Local
2.09	Causes for Permit Modification, Revocation, or Suspension	SIP
2.10	Stack Height Considerations	SIP
2.11	Air Quality Model Usage	SIP
2.16	Title V Operating Permits	SIP
4.01	General Provisions for Emergency Episodes	SIP
4.02	Episode Criteria	SIP
4.03	General Abatement Requirements	SIP
4.07	Episode Reporting Requirements	SIP
5.00	Standards for Toxic Air Contaminants and Hazardous Air Pollutants	Local
5.01	General Provisions	SIP
5.02	Federal Emission Standards for Hazardous Air Pollutants Incorporated by Reference	Local
5.14	Hazardous Air Pollutants and Source Categories	Local
5.15	Chemical Accident Prevention Provisions	Local
5.20	Methodology for Determining Benchmark Ambient Concentration of a Toxic Air Contaminant	Local
5.21	Environmental Acceptability for Toxic Air Contaminants	Local
5.22	Procedures for Determining the Maximum Ambient Concentration of a Toxic Air Contaminant	Local
5.23	Categories of Toxic Air Contaminants	Local
6.01	General Provisions (for Existing Affected Facilities)	SIP

Regulation	Title	Type
6.02	Emission Monitoring for Existing Sources	SIP
6.09	Standards of Performance for Existing Process Operations	SIP
6.13	Standard of Performance for Existing Storage Vessels for Volatile Organic Compounds	SIP
6.18	Standards of Performance for Solvent Metal Cleaning Equipment	SIP
6.22	Standard of Performance for Existing Volatile Organic Materials Loading Facilities	SIP
6.24	Standard of Performance for Existing Sources Using Organic Materials	SIP
6.26	Standard of Performance for Existing Volatile Organic Compound Water Separators	SIP
6.42	Reasonably Available Control Technology Requirements for Major Volatile Organic Compound and Nitrogen Oxides Emitting Facilities	SIP
6.40	Standards of Performance for Gasoline Transfer to Motor Vehicles (Stage II Vapor Recovery)	SIP
6.43	Volatile Organic Compound Emission Reduction Requirements	SIP
7.01	General Provisions (for New Affected Facilities)	SIP
7.02	Federal New Source Performance Standards Incorporated by Reference	Local
7.06	Standards of Performance for New Indirect Heat Exchangers	SIP
7.08	Standards of Performance for New Process Operations	SIP
7.12	Standard of Performance for New Storage Vessels for Volatile Organic Compounds	SIP
7.15	Standards of Performance for Gasoline Transfer to New Service Station Storage Tanks (Stage I Vapor Recovery)	SIP
7.22	Standard of Performance for New Volatile Organic Materials Loading Facilities	SIP
7.25	Standard of Performance for New Sources Using Volatile Organic Compounds	SIP
7.36	Standard of Performance of New Volatile Organic Compound Water Separators	SIP

# c. **Basis for Applicability**

Regulation	Basis for Applicability
2.03	Establishes requirements for Permits to Construct and Operate
2.16	Title V source
5.00	Establishes definitions of terms used in the Strategic Toxic Air Reduction Program.
5.01	Establishes general provisions for process equipment from which a toxic air contaminant is or may be emitted.
5.02	Adoption and Incorporation by Reference of National Emission Standards for Hazardous Air Pollutants
5.20	Establishes the methodology for determining the benchmark ambient concentration of a toxic air contaminant.
5.21	Establishes the criteria for determining the environmental acceptability of emissions of toxic air contaminants.
5.22	Establishes the procedures for determining the maximum ambient

Regulation	Basis for Applicability
	concentration of a toxic air contaminant.
5.23	Establishes categories of toxic air contaminants.
6.09	Applies to each process operation that is not otherwise regulated by any other portion of Regulation 6 and was in existence or had a construction permit issued by the District by September 1, 1976.
6.13	VOC storage tanks greater than 250 gallon capacity are subject to Regulation 6.13 for VOC which were installed before September 1, 1976.
6.18	Applies to cold cleaners.
6.22	Applies to loading facilities which load more than 200 gallons of "volatile organic materials" into tank trunks, trailer, or railroad tank cars in any one day, commenced before September 1, 1976.
6.24	Establishes VOC standards for affected facilities constructed before June 13, 1979.
6.26	Applies to any compartment of any vessel or device operated for the recovery of VOC compounds that contains 200 gallons a day or more of any VOCs from any equipment which processes, refines, stores, or handles hydrocarbons with a Reid vapor pressure of 0.5 psia or greater that was in being or under construction prior to September 1, 1976.
6.40	Applies to the refueling of motor vehicles at a gasoline dispensing facility.
6.42	Applies to the NOx emissions from all NOx-emitting facilities located at all major NOx-emitting stationary sources.
6.43	Regulation 6.43 applies to storage tanks 58109, 58140, and 58108 (section 18).
7.01	Applies to new facilities
7.02	Adoption of Federal New Source Performance Standards
7.06	Applies to each indirect heat exchanger having input capacity of more than one million BTU per hour commenced after September 1, 1976.
7.08	Equipment installed after September 1, 1976 and subject to the PM emission standard.
7.12	Storage tanks with a capacity greater than 250 gallons constructed after April 19, 1972
7.15	Applies to the transfer of VOC from transport tanks into storage tanks constructed after June 13, 1979
7.22	Applies to loading facilities which load more than 200 gallons of "volatile organic materials" into tank trunks, trailer, or railroad tank cars in any one day, commencing after June 13, 1979.
7.25	Affected facility constructed after June 13, 1979 for VOC.
7.36	Applies to each oil-effluent water separator that recovers 200 gallons a day or more of an volatile organic compound from any equipment which processes, refines, stores, or handles hydrocarbons with a Reid vapor pressure of 0.5 pounds or greater commenced after April 19, 1972.
40 CFR 60 Subpart A	General Provisions
40 CFR 60 Subpart Db	Applies to each steam generating unit that commences construction, modification, or reconstruction after June 19, 1984, and that has a heat input capacity from fuels combusted in the steam generating unit of greater than 29 megawatts (MW) (100 MMBtu/hr)).

Regulation	Basis for Applicability
40 CFR 60 Subpart Kb	Applies to storage vessels of volatile organic liquids which have a design capacity of 19,800 gal or greater, construction commenced after July 23, 1984, and a maximum true vapor pressure 15.0 kPa or greater.
40 CFR 60 Subpart IIII	Applies to stationary CI internal combustion engines that commences construction after July 11, 2005.
40 CFR 61 Subpart V	Applies to the following sources that are intended to operate in volatile hazardous air pollutant service: pumps, compressors, pressure relief devices, sampling connection systems, open-ended valves or lines, valves, connectors, surge control vessels, bottoms receivers, and control devices or systems.
40 CFR 63 Subpart A	These standards regulate specific categories of stationary sources that emit (or have the potential to emit) one or more hazardous air pollutants.
40 CFR 63 Subpart DD	Applies to a major source of HAP emissions which is receives off-site materials and has waste management operations or recovery operations.
40 CFR 63 Subpart OO	Applies to tanks for which another subpart of 40 CFR parts 60, 61, or 63 references the use of this subpart for such air emission control.
40 CFR 63 Subpart PP	Applies to the control of air emissions from containers for which another subpart of 40 CFR parts 60, 61, or 63 references the use of this subpart for such air emission control.
40 CFR 63 Subpart EEE	Applies to all hazardous waste combustors.
40 CFR 63, Subpart ZZZZ	Applies to existing, new, and reconstructed stationary engines.  The generators are stationary RICE located at an area source of HAP emissions, therefore 40 CFR 63 Subpart ZZZZ applies.
40 CFR 63 Subpart CCCCCC	Applies to gasoline storage tanks located at an area source of HAP emissions

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# d. Emission Unit U-KAC-Tanks1

U-KAC-Tanks1 Emission Points		
Emission Point	Description	Applicable Regulations
14-122	KAC Storage Tank 13,500 gal 1962	
14-212	KAC Storage Tank (with Condenser/ 14-214) 5,800 gal 1972	1.05, 5.00, 5.01, 5.20, 5.21, 5.22, 5.23, 6.13
14-535	KAC Storage Tank 9,000 gal 1962	
14-246	KAC Weigh Tank (with Condenser/ 14-245) 1,500 gal 1972	1.05, 5.00, 5.01, 5.20, 5.21, 5.22,
14-254	KAC Process Tank (with Condenser/ 14-253) 750 gal 1972	5.23, 6.24

## ii. Standards/Operating Limits

# 1) **VOC**

- (a) Per Regulation 6.13, there are no equipment standards that apply to Emission Points 14-122, 14-212, and 14-535, due to the vapor pressure as stored being less than 1.5 psia.
- (b) Regulation 6.24 limits the pound per hour and pound per day emissions of Class II and Class III solvents for Emission Points 14-246 and 14-254, unless the emissions are reduced by at least 85%. (The source submitted a one-time demonstration on August 1, 2003 that shows the potential VOC emissions cannot exceed the emission standards from Regulation 6.24 for Class II and Class III solvents for Emission Points 14-246 and 14-254 uncontrolled. Therefore, there are no monitoring, recordkeeping, or reporting requirements for these emission points.)

#### 2) **HAP**

The emissions from 14-122 and 14-535 shall be vented to the Regenerative Thermal Oxidizer, as required by Construction Permit 263-05-C.

#### 3) **TAC**

Per Regulations 5.00 and 5.21, TAC emissions must not exceed environmentally acceptable levels. (The District determined on March 13, 2013 that uncontrolled potential individual TAC emissions of toluene were de minimis.)

## iii. Monitoring and Record Keeping

#### **HAP**

As required by Construction Permit 263-05-C, records shall be maintained of periods of time when the RTO was not operated.

## e. Emission Unit U-KAC-Tanks2

U-KAC-Tanks2 Emission Points		
<b>Emission Point</b>	Description	Applicable Regulations
14-134	KAC Storage Tank	
14-134	30,000 gal 1973	
14-142	KAC Storage Tank	
14-142	30,000 gal 1973	1.05, 5.00, 5.01, 5.20, 5.21,
14-152	KAC Storage Tank	5.22, 5.23, 7.12
14-132	30,000 gal 1973	
14-160	KAC Storage Tank	
14-100	30,000 gal 1973	

U-KAC-Tanks2 Emission Points		
<b>Emission Point</b>	Description	Applicable Regulations
14-682	KAC Storage Tank	
	5,200 gal 1973	
14-684	KAC Storage Tank	
14 004	5,000 gal 1973	
14-685	KAC Storage Tank	
14-005	4,500 gal 1974	
14-687	KAC Storage Tank	
14-067	4,950 gal 1974	
14 (00	KAC Storage Tank	
14-688	4,950 gal 1974	
14 600	KAC Storage Tank	
14-689	8,800 gal 1978	
14.600	KAC Storage Tank	
14-690	6,700 gal 1980	
14-691	KAC Storage Tank	
14-091	7,500 gal 1981	
14.605	KAC Re-claimed Wastewater Tank	
14-695	300 gal 1985	
14-696	KAC Re-claimed Wastewater Tank	
14-070	300 gal 1985	

# ii. Standards/Operating Limits

# 1) **VOC**

- (a) Regulation 7.12, section 3.3 requires submerged fill if the materials have an as stored vapor pressure of 1.5 psia or greater.
- (b) Regulation 7.12 applies due to the size of the tanks, however, since the vapor pressure as stored is less than 1.5 psia there are no applicable emission or equipment standards.

# 2) **TAC**

Per Regulations 5.00 and 5.21, TAC emissions must not exceed environmentally acceptable levels.

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#### f. Emission Unit U-KAC-Tanks3

# i. **Equipment**

U-KAC-Tanks3 Emission Points		
Emission	Description	Applicable
Point		Regulations
14-126	KAC Storage Tank 13,500 gal 1962	
14-346	KAC Storage Tank 13,000 gal 1962	
14-352	KAC Storage Tank 13,000 gal 1962	1.05.5.00.5.01
14-370	KAC Feed Tank - North with process condenser 14-385 6,500 gal 1972	1.05, 5.00, 5.01, 5.20, 5.21, 5.22, 5.23, 6.13
14-376	KAC Feed Tank - South with process condenser 14-389 6,500 gal 1972	
14-525	KAC Storage Tank 5,500 gal 1962	
14-290	KAC Blend Tank with process condenser 14-294 14,000 gal 1972	1.05, 5.00, 5.01, 5.20, 5.21, 5.22, 5.23, 6.24

## ii. Standards/Operating Limits

#### 1) **VOC**

- (a) Per Construction Permits 245-05-C(R1) and 187-04-C, Emission Points 14-126, 14-370, 14-376, and 14-525 must be equipped with a permanent submerged fill pipe or equivalent. The use of the Regenerative Thermal Oxidizer (C-KAC-14-723) shall be considered to be equivalent.
- (b) Per Construction Permit 254-05-C, Emission Points 14-346 and 14-352 must be equipped with a permanent submerged fill pipe or equivalent. The use of operating with a low level interlock shall be considered to be equivalent.
- (c) Regulation 6.24 limits the pound per hour and pound per day emissions of Class II and Class III solvents for Emission Point 14-290, unless the emissions are reduced by at least 85%. Per Construction Permit 263-05-C the emission from this emission point shall be controlled by the Regenerative Thermal Oxidizer (C-KAC-14-723).

#### 2) **TAC**

Per Regulations 5.00 and 5.21, TAC emissions must not exceed environmentally acceptable levels.

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# g. Emission Unit U-KAC-Tanks4

# i. **Equipment**

U-KAC-Tanks4 Emission Points		
<b>Emission Point</b>	Description	Applicable Regulations
14-190	KAC Storage Tank 2,100 gal 1976	
14-780	KAC Storage Tank 15,000 gal 1987	1.05, 5.00, 5.01, 5.20, 5.21, 5.22, 5.23, 7.12
14-790	KAC Storage Tank 10,000 gal 1987	

# ii. Standards/Operating Limits

# 1) **VOC**

Regulation 7.12, section 3.3 requires submerged fill if the materials have an as stored vapor pressure of 1.5 psia or greater. Regulation 7.12 applies due to the size of the tanks, however, since the vapor pressure as stored is less than 1.5 psia there are no applicable emission or equipment standards.

## 2) **TAC**

Per Regulations 5.00 and 5.21, TAC emissions must not exceed environmentally acceptable levels.

## h. Emission Unit U-KAC-Reactor

#### i. **Equipment**

U-KAC-Reactor Emission Points		
Emission	Description	Applicable Regulations
Point		
14-236	KAC Weigh Tank	
14-262	KAC Reactor (with	1.05, 5.00, 5.01, 5.20, 5.21, 5.22, 5.23,
14-202	condenser)	6.24
14-400	KAC Separator	
14-510	KAC Separator System	1.05, 5.00, 5.01, 5.20, 5.21, 5.22, 5.23,
14-540	KAC Pelletizer	7.25

## ii. Standards/Operating Limits

## 1) **VOC**

- (a) Per Regulation 6.24, Emission Points 14-236, 14-262, and 14-400 are limited to VOC emissions of less than 40 lbs/day and 8 lbs/hr for Class II solvents and less than 3000 lbs/day and 450 lbs/hr for Class III solvents, unless the emissions are reduced by at least 85%.
- (b) Per Regulation 7.25, emissions from Emission Points 14-510 and 14-540 must be vented to the Regenerative Thermal Oxidizer (C-KAC-14-723).

In addition, Emission Points (14-236, 14-262, 14-400, 14-510, and 14-540) shall also be vented to the RTO. (The regenerative thermal oxidizer is considered BACT for Regulation 7.25. Compliance with the 12.37 tons per 12 consecutive month period, which is the controlled potential VOC emissions, is demonstrated by monitoring the oxidizer and calculating the VOC emissions.)

(c) Per Regulation 2.05, Emission Points 14-236, 14-262, 14-400, 14-510, and 14-540 are limited to combined VOC emissions of less than 12.37 tons per 12 consecutive month period in order to avoid PSD.

#### 2) **TAC**

Per Regulations 5.00 and 5.21, TAC emissions must not exceed environmentally acceptable levels.

#### i. Emission Unit U-KAC-Load

#### i. **Equipment**

U-KAC-Load Emission Points		
Emission	Description	Applicable Regulations
Point		
14-151 and	KAC R/C Load/Unload Rack	
14-130	East and West	
14-366	KAC Recycle Solvent Load Spot	
14-300	0	1.05, 5.00, 5.01, 5.20, 5.21, 5.22,
14-390	KAC T/T Load/Unload Rack	5.23, 6.22
14-370	Spots 1, 2, 3	
14-530	KAC T/T Load/Unload Rack	
14-330	Brick Pad	

## ii. Standards/Operating Limits

#### 1) **VOC**

Per Regulation 6.22, "volatile organic material" loading into any tank truck, trailer, or railroad car must be accomplished by submerged fill, bottom loading, or other equivalent methods approved by the District. (Volatile organic materials (VOMs) are any volatile organic compounds (VOCs) having a true vapor pressure of 1.5 psia or greater under actual storage conditions. There are no standards if the source loads less than 200 gallons per day of "volatile organic material" in Regulation 6.22.) For Emission Point 14-390 all loading is accomplished by using submerged fill.

#### 2) **TAC**

Per Regulations 5.00 and 5.21, TAC emissions must not exceed environmentally acceptable levels.

# j. Emission Unit U-KAC-Powder

# i. **Equipment**

U-KAC-Powder Emission Points		
Emission	Description	Applicable
Point		Regulations
14-430	KAC Dryer	
14-445	KAC Pellet Transfer System	2.05, 6.09
14-484	KAC Grinder and Yield Recovery	2.03, 0.09
14-404	System	

# ii. Standards/Operating Limits

## 1) **PM**

- (a) In accordance with Regulation 6.09, Table 1, PM standard for Emission Point 14-445 is 2.58 lb/hr for process throughput of 1000 lb/hr or less:
- (b) In accordance with Regulation 6.09, Table 1, PM emission standard for Emission Points (14-430 and 14-484 combined) is

$$E = 4.10(1.765)^{0.67} = 6.0 \text{ lb/hr}$$

- (c) Per Regulation 2.05, Emission Points 14-430 and 14-484 are limited to combined PM emissions of less than or equal to 25 tons per 12 consecutive month period in order to avoid PSD.
- (d) Per Regulation 2.05, Emission Points 14-430 and 14-484 are limited to combined  $PM_{10}$  emissions of less than or equal to 15 tons per 12 consecutive month period in order to avoid PSD.

## 2) **Opacity**

Regulation 6.09, section 3.1 establishes opacity standards.

# k. Emission Unit U-KAC-DryPack

## i. **Equipment**

U-KAC-DryPack Emission Points		
Emission	Description	Applicable
Point		Regulations
14-429	KAC Rework Drum/Bag Dump	
	Hopper	2.05, 7.08
14-499	KAC Rework Transfer System	2.03, 7.08
14-570	KAC Rework Tote Dump Hopper	
14-453	KAC Dry Packaging Area Spot	
14-433	Ventilation	7.08
14-497	KAC Bulk Packaging System	

## ii. Standards/Operating Limits

# 1) **PM**

(a) In accordance with Regulation 7.08, Table 1, PM emissions for Emission Points (14-497 and 14-453) is 2.34 lb/hr each for process throughput of 1000 lb/hr or less.

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- (b) Per construction permits 58-98-C and 59-98-C, PM emissions for Emission Points (14-429, 14-499, and 14-570) is 1.0 lb/hr each.
- (c) Per Regulation 2.05, PM emissions are limited to 1.0 lb/hr each for Emission Points (14-429, 14-499, and 14-570). (The potential uncontrolled PM emissions are over 25 tons for Emission Points 14-429, 14-499, and 14-570. These emission limits ensure PSD avoidance.)

# 2) **Opacity**

Regulation 7.08, section 3.1 establishes opacity standards.

## 1. Emission Unit U-KAC-Misc

#### i. **Equipment**

U-KAC-Misc Emission Points		
Emission	Description	Applicable Regulations
Point	_	
14-063	KAC Oil/Water Separator	1.05, 5.00, 5.01, 5.20, 5.21, 5.22,
14-003	5,000 gal 1972	5.23, 6.26
	KAC Wastewater	
14-175	Equalization Tank	
	42,000 gal 1991	5.00, 5.01, 5.20, 5.21, 5.22, 5.23
14-238	KAC Weigh Tank	
14-236	55 gal 1992	
14-181	KAC Wastewater Stripper	
14-258	KAC Reactor	
14-286	KAC Process Tank	
14-280	1,000 gal 1995	1.05, 5.00, 5.01, 5.20, 5.21, 5.22,
14-705	KAC Product Loading	5.23, 7.25
	Station	
14-706	KAC Product Loading	
	Station	

# ii. Standards/Operating Limits

## 1) **VOC**

- (a) Per Regulation 7.25 and Construction Permit 101-90-C, Emission Point 14-181 is limited to VOC emissions of 2.0 lb/hr and 1.0 tpy.
- (b) Per Regulation 7.25 and Construction Permit 187-04-C, Emission Point 14-258 is limited to 5.0 tpy (The source submitted a BACT analysis dated

- May 2, 2002, which demonstrated that the potential VOC emissions cannot exceed the limits).
- (c) Per Regulation 7.25 and Construction Permit 232-02-C, Emission Point 14-286 is limited to 1.4 tpy. (The source submitted a BACT analysis dated July 3, 2001, which demonstrated that the potential VOC emissions cannot exceed the limits.)
- (d) Per Construction Permit 263-05-C, emissions from Emission Points 14-258, 14-705, and 14-706 must be vented to the RTO.
- (e) Per Regulation 7.25, Emission Points 14-705 and 14-706 is limited to 1.0 tpy total. (The source submitted a BACT analysis dated April 17, 1997, which demonstrated that the potential VOC emissions cannot exceed the limits.)
- (f) Per Regulation 6.26, Emission Point 14-063 shall not recover 200 gallons a day or more of any volatile organic compounds from any equipment which processes, refines, stores, or handles hydrocarbons with a Reid vapor pressure of 0.5 pounds or greater, unless the emissions of all hydrocarbon vapors and gases are reduced 90% by weight.

## 2) **TAC**

Per Regulations 5.00 and 5.21, TAC emissions must not exceed environmentally acceptable levels.

#### m. Emission Unit U-KAC-D-PKG

## i. **Equipment**

U-KAC-D-PKG Emission Points		
Emission	Description	Applicable
Point		Regulations
19-195	KAC-D Product Transfer Receiver #1	
19-215	KAC-D Product Transfer Receiver #3	
19-265	KAC-D Rework Bag/Drum Dump Station	2.05, 7.08
19-285	KAC-D Tote Dump Station	
19-375	Packaging System	

## ii. Standards/Operating Limits

# 1) **PM**

(a) In accordance with Regulation 7.08, Table 1, PM emission standard for Emission Points 19-195, 19-215, 19-265, 19-285, and 19-375 combined is

$$E = 3.59(1.440)^{0.62} = 4.5 \text{ lb/hr}$$

- (b) Per Regulation 2.05, Emission Points 19-195, 19-215, 19-265, 19-285, and 19-375 are limited to combined PM emissions of less than or equal to 25 tons per 12 consecutive month period in order to avoid PSD.
- (c) Per Regulation 2.05, Emission Points 19-195, 19-215, 19-265, 19-285, and 19-375 are limited to combined  $PM_{10}$  emissions of less than or equal to 15 tons per 12 consecutive month period in order to avoid PSD.
- (d) In accordance with Regulation 7.08, Table 1, PM emissions for Emission Point 19-375 is 2.34 lb/hr for process throughput of 1000 lb/hr or less.

# 2) **Opacity**

Regulation 7.08, section 3.1 establishes opacity standards.

#### n. Emission Unit U-KB-Columns+

# i. **Equipment**

U-KB-Columns+ Emission Points		
Description	Applicable Regulations	
KB Distillation Columns (and process condenser 03-761)	1.05, 2.04, 5.00, 5.01, 5.20, 5.21, 5.22, 5.23, 6.24, 40 CFR 64	
KB Load Rack	1.05, 5.00, 5.01, 5.20, 5.21, 5.22, 5.23, 6.22	
KB Load Rack		
KB Railcar Load Rack	1.05, 2.04, 5.00, 5.01, 5.20, 5.21, 5.22, 5.23, 7.22	
KB Storage Tank	1.05, 2.04, 5.00, 5.01, 5.20, 5.21, 5.22, 5.23, 7.02, 7.12, 40 CFR 60 Subpart Kb	
	Description  KB Distillation Columns (and process condenser 03-761)  KB Load Rack  KB Load Rack  KB Railcar Load Rack	

# ii. Standards/Operating Limits

## 1) **VOC**

(a) Regulation 6.24 limits the pound per hour and pound per day emissions of Class II and Class III solvents for Emission Point 03-810, unless the emissions are reduced by at least 85%. (If the source is venting the emissions to the Regenerative Thermal Oxidizer (C-KAC-14-723), the RTO is assumed to attain at least an average thermal efficiency of 95% VOC destruction efficiency and to meet the reduction requirements of 85%.)

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(b) Regulations 6.22 and 7.22 apply to Emission Points 04-516, 04-500, and 57-101-89. "Volatile organic material" loading into any tank truck, trailer, or railroad car must be accomplished by submerged fill, bottom loading, or other equivalent methods approved by the District. (Volatile organic materials (VOMs) are any volatile organic compounds (VOCs) having a true vapor pressure of 1.5 psia or greater under actual storage conditions. There are no standards if the source loads less than 200 gallons per day of "volatile organic material" in Regulations 6.22 and 7.22. These loading facilities have submerged fill.)

- (c) Regulation 7.12 requires that Emission Point 58-325 shall have no visible holes, tears, or other openings in the seal and all openings shall have covers, lids, or seals.
- (d) 40 CFR 60 Subpart Kb requires that Emission Point 58-325 be equipped with a fixed roof in combination with an internal floating roof meeting certain specifications.
- (e) Per Construction Permit 263-05-C, Emission Points 03-810, 04-516, and 04-500, shall vent the emissions to the Regenerative Thermal Oxidizer (C-KAC-14-723).
- (f) Per Construction Permit 523-07-C(R1), Emission Point 03-810 shall be vented to a control device at all times the process is in operation. The VOC emissions shall be vented to the Alternate Thermal Oxidizer (C-KAC-14-726) during any bypassing of the RTO (C-KAC-17-723).
- (g) Per Regulation 2.04 and Construction Permit 182-04-C, Emission Points 03-810, 04-516, 57-101-89, 58-325, 03-770, 03-771, 03-785, 03-801, 03-850, 03-851, 03-860, 03-880, 03-881, 03-930, 03-931, 04-521, 04-525, 04-880, 13-800, 58-101, 58-108, 58-109, and 58-140, shall limit the VOC emissions to less than 40 tons per 12 consecutive month period in order to avoid PSD/Non-attainment NSR.

# 2) **TAC**

Per Regulations 5.00 and 5.21, TAC emissions must not exceed environmentally acceptable levels.

## iii. Monitoring and Record Keeping

# **VOC**

40 CFR 60 Subpart Kb requires that Emission Point 58-325 be visually inspected and must keep records of the VOL stored, the period of the storage, the vapor pressure of the VOL stored, and must keep records of inspections.

# iv. **Reporting**

## **VOC**

For Emission Point 58-325, 40 CFR 60 Subpart Kb requires that the owner or operator report visual inspections, any holes or tears found in the seal, and certification of control equipment.

## o. Emission Unit U-KB-Tanks1

	U-KB-Tanks1 Emission Points		
Emission Point	Description	Applicable Regulations	
03-770	KB Mix Tank #1 500 gal 1966	1.05, 5.00, 5.01, 5.20, 5.21, 5.22, 5.23, 6.24	
03-785	KB Mix Tank #3 500 gal 1974	1.03, 3.00, 3.01, 3.20, 3.21, 3.22, 3.23, 0.24	
03-771	KB Storage Tank 500 gal 1962		
03-801	KB Decant Tank 6,600 gal 1962		
03-850	KB Rundown Tank 10,000 gal 1966		
03-851	KB Rundown Tank 10,000 gal 1966		
03-860	KB Rundown Tank 10,000 gal 1966		
03-880	KB Decant Tank 6,600 gal 1962		
03-881	KB Decant Tank 6,600 gal 1962	1.05, 5.00, 5.01, 5.20, 5.21, 5.22, 5.23, 6.13	
03-930	KB Rundown Tank 7,200 gal 1962	1.03, 3.00, 3.01, 3.20, 3.21, 3.22, 3.23, 0.13	
03-931	KB Rundown Tank 7,200 gal 1962		
04-521	KB Storage Tank 32,600 gal 1966		
04-525	KB Storage Tank 32,600 gal 1966		
04-880	KB Storage Tank 30,000 gal 1962		
13-800	KB Storage Tank 96,600 gal 1970		
58-101	KB Storage Tank 1,470,000 gal 1962		

	U-KB-Tanks1 Emission Points		
Emission	Description	Applicable Regulations	
Point			
58-108	KB Storage Tank		
36-106	1,470,000 gal 1966		
58-109	KB Storage Tank	1.05, 5.00, 5.01, 5.20, 5.21, 5.22, 5.23, 6.13,	
36-109	1,470,000 gal 1966	6.43	
58-140	KB Storage Tank		
36-140	1,470,000 gal 1960		
03-792	KB Transfer System for	7.08	
03-192	Tank (14-785)	7.00	

## ii. Standards/Operating Limits

#### 1) **VOC**

(a) For Emission Points 03-771, 03-800, 03-801, 03-850, 03-851, 03-860, 03-880, 03-881, 03-930, 03-931, 03-940, 04-521, 04-525, 04-880, 13-800, 58-101, 58-108, 58-109, and 58-140, Regulation 6.13 applies due to the size of the tanks, however since the vapor pressure as stored is less than 1.5 psia there are no applicable standards in the regulation.

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- (b) Per Regulation 6.13, Emission Points 04-521, 04-525, and 04-880 must be equipped with a permanent submerged fill pipe or equivalent.
- (c) Regulation 6.24 limits the pound per hour and pound per day emissions of Class II and Class III solvents for Emission Points 03-770 and 03-785, unless the emissions are reduced by at least 85%. (The source submitted a one-time demonstration on August 1, 2003 that shows the potential VOC emissions cannot exceed the emission standards from Regulation 6.24 for Class II and Class III solvents for Emission Points 03-770 and 03-785. Therefore, there are no monitoring, recordkeeping, or reporting requirements for these emission points)
- (d) Regulation 6.43 requires Emission Points 58-108, 58-109, and 58-140 to be equipped with an internal floating roof with certain specifications.
- (e) Per Construction Permits 263-05-C and 264-05-C, Emission Points 03-801, 03-850, 03-851, 03-860, 03-880, 03-881, 03-930, 03-931, 04-521, 04-525, 04-880, and 13-800, shall vent the emissions to the Regenerative Thermal Oxidizer (C-KAC-14-723) or the Alternative Thermal Oxidizer (ATO).

#### 2) **PM**

In accordance with Regulation 7.08, Table 1, PM emissions for Emission Point 03-792 is 2.34 lb/hr for process throughput of 1000 lb/hr or less. (The source submitted a one-time demonstration on August 1, 2003 that shows the potential uncontrolled PM emissions cannot exceed the PM emission standard.)

# 3) **Opacity**

Regulation 7.08, section 3.1 establishes opacity standards.for Emission Point 03-792.

# **4) TAC**

Per Regulations 5.00 and 5.21, TAC emissions must not exceed environmentally acceptable levels.

# iii. Monitoring and Record Keeping

#### **VOC**

Regulation 6.43 requires records of the total pounds filled per tank monthly to be kept for Emission Points 58-108, 58-109, and 58-140.

# p. Emission Unit U-KVK-Tanks1

	U-KVK-Tanks1 Emission Points		
Emission	Description	Applicable Regulations	
Point			
03-106	KVK "G" Process Tank 1,500 gal		
03-100	1973		
	KVK "G" Process Tank		
03-118	750 gal		
	1973		
03-120	KVK "G" Process Tank		
03-120	750 gal 1973		
	KVK "H" Process Tank		
03-206	500 gal		
	1973	1.05 5.00 5.01 5.20 5.21 5.22 5.22 6.24	
	KVK "H" Process Tank	1.05, 5.00, 5.01, 5.20, 5.21, 5.22, 5.23, 6.24	
03-207	750 gal		
	1973		
	KVK "H" Process Tank		
03-209	750 gal		
	1973		
	KVK "H" Process Tank		
03-217	1,800 gal		
	1973		
	KVK Process Tank		
03-220	25,000 gal		
	1973		

U-KVK-Tanks1 Emission Points		
	KVK Weigh Tank	
03-205	15,000 gal	1.05, 5.00, 5.01, 5.20, 5.21, 5.22, 5.23, 7.12
	1973	

# ii. Standards/Operating Limits

## 1) **VOC**

- (a) Regulation 6.24 limits the pound per hour and pound per day emissions of Class II and Class III solvents for Emission Points 03-106, 03-118, 03-120, 03-206, 03-207, 03-209, 03-217, and 03-220, unless the emissions are reduced by at least 85%.
- (b) Regulation 7.12, section 3.3 requires submerged fill for Emission Point 03-205 if the materials have an as stored vapor pressure of 1.5 psia or greater. Regulation 7.12 applies due to the size of the tanks, however, since the vapor pressure as stored is less than 1.5 psia there are no applicable emission or equipment standards.

## 2) **TAC**

Per Regulations 5.00 and 5.21, TAC emissions must not exceed environmentally acceptable levels.

# q. Emission Unit U-KVK-Tanks2

U-KVK-Tanks2 Emission Points		
<b>Emission Point</b>	Description	Applicable Regulations
05-203	KVK Storage Tank 12,143 gal 1972	
05-435	KVK Product Storage Tank 40,000 gal 1966	
05-440	KVK Product Storage Tank 40,000 gal 1966	
05-445	KVK Product Storage Tank 40,000 gal 1966	
05-450	KVK Product Storage Tank 60,000 gal 1970	1.05 5.00 5.01 5.20 5.21 5.22
05-452	KVK Product Storage Tank 60,000 gal 1970	1.05, 5.00, 5.01, 5.20, 5.21, 5.22, 5.23, 6.13
05-454	KVK Product Storage Tank 40,000 gal 1970	
05-456	KVK Product Storage Tank 40,000 gal 1970	
05-458	KVK Product Storage Tank 40,000 gal 1970	
05-465	KVK Product Storage Tank 30,000 gal 1970	
05-467	KVK Product Storage Tank 30,000 gal 1970	

U-KVK-Tanks2 Emission Points		
<b>Emission Point</b>	Description	Applicable Regulations
05-469	KVK Product Storage Tank	
03-407	30,000 gal 1970	
05-471	KVK Product Storage Tank	
03-471	100,000 gal 1972	
05-473	KVK Product Storage Tank	
03-473	30,000 gal 1976	
05-475	KVK Product Storage Tank	
03-473	30,000 gal 1976	
05-477	KVK Product Storage Tank	
03-477	30,000 gal 1976	

## ii. Standards/Operating Limits

# 1) **VOC**

(a) For Emission Points 05-435, 05-440, 05-445, 05-450, 05-452, 05-454, 05-456, 05-458, 05-465, 05-467, 05-469, 05-471, 05-473, 05-475, and 05-477, Regulation 6.13 requires that the owner or operator not store materials with an as stored vapor pressure of greater than or equal to 1.5 psia.

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(b) Per Regulation 6.13, Emission Point 05-203 must be equipped with a permanent submerged fill pipe or equivalent.

# 2) **TAC**

Per Regulations 5.00 and 5.21, TAC emissions must not exceed environmentally acceptable levels.

## r. Emission Unit U-KVK-G&HReact

## i. **Equipment**

U-KVK-G&HReact Emission Points		
<b>Emission Point</b>	Description	Applicable Regulations
03-100	KVK "G" Reactor	
03-115	KVK "G" Mix/Feed Tank	105 500 501 500 501 500
03-200	KVK "H" Reactor	1.05, 5.00, 5.01, 5.20, 5.21, 5.22,
03-215	KVK "H" Mix/Feed Tank 12,400 gal 1973	5.23, 6.24
03-112	"G" Mix Tank 100 gal 1988	5.00, 5.01, 5.20, 5.21, 5.22, 5.23,
03-210	"H" Mix Tank 100 gal 1988	7.25

# ii. Standards/Operating Limits

## 1) **VOC**

(a) Regulation 6.24 limits the pound per hour and pound per day emissions of Class II and Class III solvents for Emission Points 03-100, 03-115, 03-200, and

03-215, unless the emissions are reduced by at least 85%.

(b) Per Regulation 7.25, VOC emissions from Emission Points (03-112, 03-210, 02-010, 02-020, 02-030, 02-040, 02-050, 02-060, 02-070, 02-080, 03-134, 05-690, 05-691, 17-166, 03-290, 03-291, 03-296, 03-300, and 09-102), the owner or operator shall limit the VOC emissions to less than 5.0 tons per 12 consecutive month period. (A BACT determination is required to be performed for any future construction/modification subject to Regulation 7.25 for any emissions outside of the 5 tpy limit.)

# 2) **TAC**

Per Regulations 5.00 and 5.21, TAC emissions must not exceed environmentally acceptable levels.

# iii. Monitoring and Record Keeping

## 1) **VOC**

Emissions Calculation Methodology:

The VOC storage tank emissions are based upon the VOC content of the stored material and the amount of material in the tank. The emissions from the other equipment are based upon the VOC content of the materials used.

## s. **Emission Unit U-KVK-Misc**

U-KVK-Misc Emission Points		
<b>Emission Point</b>	Description	Applicable Regulations
05-460	KVK Load Racks 1-4 (East of Bldg 14)	1.05, 5.00, 5.01, 5.20, 5.21, 5.22,
05-461	KVK Rail Car Load Spots (Load Spot and Spare Spot)	5.23, 6.22
03-126	KVK Storage Tank 60,000 gal 1977	1.05, 5.00, 5.01, 5.20, 5.21, 5.22,
17-164	KVK 164 Storage Tank 40,000 gal 1966	5.23, 6.24
05-215	KVK BMA Storage Tank 15,000 gal 1983	
06-150	Styrene Storage Tank 34,000 gal 1999	1.05, 5.00, 5.01, 5.20, 5.21, 5.22, 5.23, 7.12
66-226	WWTP Storage Tank 2,000 gal 1990	
Rail	KVK Rail Car Loading	1.05, 5.00, 5.01, 5.20, 5.21, 5.22, 5.23, 7.22
02-010	KVK Product Storage Tank 60,000 gal 2001	1.05, 5.00, 5.01, 5.20, 5.21, 5.22,
02-020	KVK Product Storage Tank 60,000 gal 2001	5.23, 7.25

U-KVK-Misc Emission Points		
<b>Emission Point</b>	Description	Applicable Regulations
02-030	KVK Product Storage Tank	
02-030	60,000 gal 2001	
02-040	KVK Product Storage Tank	
02-040	60,000 gal 2001	
02-050	KVK Product Storage Tank	
02-030	60,000 gal 2001	
02-060	KVK Product Storage Tank	
02-000	60,000 gal 2001	
02-070	KVK Product Storage Tank	
02-070	60,000 gal 2001	
02-080	KVK Product Storage Tank	
02-080	60,000 gal 2001	
03-134	KVK Process Tank	
03-134	20 gal 2000	
03-126	KVK Storage Tank	
05-120	60,000 gal 1977	
03-132	KVK Storage Tank	
05-152	150 gal 1990	

## ii. Standards/Operating Limits

#### 1) **VOC**

- (a) Regulation 6.24 limits the pound per hour and pound per day emissions of Class II and Class III solvents for Emission Points 03-126 and 17-164, unless the emissions are reduced by at least 85%. (The source submitted a one-time demonstration on August 1, 2003 that shows the potential VOC emissions cannot exceed the emission standards from Regulation 6.24 for Class II and Class III solvents for Emission Points 03-126 and 17-164. Therefore, there are no monitoring, recordkeeping, or reporting requirements for these emission points.)
- (b) Per Regulation 7.25, For Emission Points 03-112, 03-210, 02-010, 02-020, 02-030, 02-040, 02-050, 02-060, 02-070, 02-080, 03-134, 05-690, 05-691, 17-166, 03-290, 03-291, 03-296, 03-300, and 09-102, the owner or operator shall limit the VOC emissions to less than 5.0 ton per 12 consecutive month period. (A BACT determination is required to be performed for any future construction/modification subject to Regulation 7.25 for any emissions outside of the 5 tpy limit.)
- (c) Regulations 6.22 and 7.22 apply to Emission Points (05-460, 05-461, and Rail). "Volatile organic material" loading into any tank truck, trailer, or railroad car must be accomplished by submerged fill,

- bottom loading, or other equivalent methods approved by the District.
- (d) For Emission Points 05-460, 05-461, and Rail, there are no standards if the source loads less than 200 gallons per day of "volatile organic material" in Regulations 6.22 and 7.22. These loading facilities have submerged fill.
- (e) For Emission Points 05-215, 06-150, and 66-226, Regulation 7.12 requires that the owner or operator not store materials with an as stored vapor pressure of greater than or equal to 1.5 psia.

## 2) **TAC**

Per Regulations 5.00 and 5.21, TAC emissions must not exceed environmentally acceptable levels.

# t. Emission Unit U-KV1-Feed1

## i. **Equipment**

U-KV1-Feed1 Emission Points		
<b>Emission Point</b>	Description	Applicable Regulations
05-670	KV1 Storage Tank	1.05, 5.00, 5.01, 5.20, 5.21, 5.22, 5.23,
03-070	10,000 gal 1966	6.13
	KV1 North Storage Tank	
05-678	5,000 gal	
	1975	
	KV1 South Storage Tank	
05-679	14,000 gal	
	1975	1.05, 5.00, 5.01, 5.20, 5.21, 5.22, 5.23,
	KV1 Storage Tank	7.12
17-160	25,000 gal	
	1983	
	KV1 Storage Tank	
17-167	544 gal	
	1984	

# ii. Standards/Operating Limits

## 1) **VOC**

- (a) For Emission Point 05-670, Regulation 6.13 requires that the owner or operator not store materials with an as stored vapor pressure of greater than or equal to 1.5 psia.
- (b) For Emission Points 05-678, 05-679, 17-160 and 17-167, Regulation 7.12 requires that the owner or operator not store materials with an as stored vapor pressure of greater than or equal to 1.5 psia.

#### 2) **TAC**

Per Regulations 5.00 and 5.21, TAC emissions must not exceed environmentally acceptable levels.

#### u. Emission Unit U-KV1-Feed2

## i. **Equipment**

U-KV1-Feed2 Emission Points		
<b>Emission Point</b>	Description	Applicable Regulations
	KV1 Feed Tank	
05-690	14,000 gal	
	1986	
	KV1 Feed Tank	1.05, 5.00, 5.01, 5.20, 5.21, 5.22, 5.23, 7.25
05-691	14,000 gal	
	1986	
17-166	KV1 Vibrating Filter	

# ii. Standards/Operating Limits

## 1) **VOC**

Per Regulation 7.25, VOC emissions from Emission Points (03-112, 03-210, 02-010, 02-020, 02-030, 02-040, 02-050, 02-060, 02-070, 02-080, 03-134, 05-690, 05-691, 17-166, 03-290, 03-291, 03-296, 03-300, and 09-102), the owner or operator shall limit the VOC emissions to less than 5.0 ton per 12 consecutive month period. (A BACT determination is required to be performed for any future construction/modification subject to Regulation 7.25 for any emissions outside of the 5 tpy limit.)

## 2) **TAC**

Per Regulations 5.00 and 5.21, TAC emissions must not exceed environmentally acceptable levels.

#### v. Emission Unit U-KV1-Pack

# i. **Equipment**

U-KV1-Pack Emission Points			
Emission	Description	Applicable Regulations	
Point			
05-874	KV1 Bulk Bag Filling Station venting to Packaging Dust Collector	7.08	

# ii. Standards/Operating Limits

#### 1) **PM**

In accordance with Regulation 7.08, Table 1, PM standard for the bulk bag filling station is:

$$E = 3.59(3.745)^{0.62} = 8.14 \text{ lb/hr}$$

## 2) **Opacity**

Regulation 7.08, section 3.1 establishes opacity standards.

#### w. Emission Unit U-KVP2-PELL

# i. **Equipment**

U-KVP2-PELL Emission Points			
Emission Point	Description	Applicable Regulations	
11-115	KVP2 Bulk Dump Station		
11-124	KVP2 50# Bag Dump Station		
11-184	KVP2 Flow Aid System		
11-194	KVP2 Pellet Rework Hopper System	2.05, 7.08	
11-210	KVP2 Pack-out Hopper System		
11-236	KVP2 Rework System		
11-154	KVP2 Pelletizer System (Installed prior to Dec 17, 1987) and associated collector (11-250)	1.05, 2.05, 5.00, 5.01, 5.20, 5.21, 5.22, 5.23, 7.08, 7.25	

# ii. Standards/Operating Limits

#### 1) **VOC**

Per Regulation 7.25 and Construction Permit 378-06-C(R1), limit VOC emissions to 4.05 lb/hr and 8.77 tons per 12 consecutive month period for Emission Point 11-154. Additionally, Emission Point 11-154, is limited by Regulation 7.25 and the BACT submitted April 1, 2011 to keep the VOC concentration of the product to less than 1,013 ppm.

## 2) **PM**

(a) In accordance with Regulation 7.08, PM emission standards for each Emission Point (11-115, 11-124, 11-154, 11-210, and 11-236) is. (The District determined on March 13, 2013 that the potential uncontrolled PM emissions cannot exceed the PM emission standard.)

$$E = 3.59(2.50)^{0.62} = 6.34 \text{ lb/hr}$$

- (b) In accordance with Regulation 7.08, Table 1, PM emission standards for Emission Points 11-184 and 11-194 is 2.34 lb/hr each for process throughput of 1000 lb/hr or less.(The District determined on March 13, 2013 that the potential uncontrolled PM emissions cannot exceed the PM emission standard.)
- (c) Per Regulation 2.05, Emission Points 11-115, 11-124, 11-130, 11-154, 11-184, 11-190, 11-194, 11-210, and 11-236 combined, shall not allow the

 $PM_{10}$  emissions to equal or exceed 15 tons per 12 consecutive month period.

# 3) **Opacity**

Regulation 7.08, section 3.1 establishes opacity standard for Emission Points 11-115, 11-124, 11-154, 11-184, 11-194, 11-210, and 11-236.

#### 4) **TAC**

Per Regulations 5.00 and 5.21, TAC emissions must not exceed environmentally acceptable levels.

#### x. Emission Unit U-KVP2-PKG

# i. **Equipment**

U-KVP2-PKG Emission Points		
Emission	Description	Applicable Regulations
Point		
05-810	KVP2 Pellet Staging Hopper	7.08
11-130	KVP2 Filter Vent Receiver	2.05, 7.08
11-190	KVP2 Rework System	2.03, 7.08

# ii. Standards/Operating Limits

## 1) **PM**

- (a) In accordance with Regulation 7.08, Table 1, PM emission standards for Emission Points 05-810 and 11-190 is 2.34 lb/hr each for process throughput of 1000 lb/hr or less.(The District determined on March 13, 2013 that the potential uncontrolled PM emissions cannot exceed the PM emission standard.)
- (b) In accordance with Regulation 7.08, Table 1, PM standard for Emission Point 11-130 is. (The District determined on March 13, 2013 that the potential uncontrolled PM emissions cannot exceed the PM emission standard.)

$$E = 3.59(2.50)^{0.62} = 6.34 \text{ lb/hr}$$

(c) Per Regulation 2.05, Emission Points 11-115, 11-124, 11-130, 11-154, 11-184, 11-190, 11-194, 11-210, and 11-236 combined, shall not allow the  $PM_{10}$  emissions to equal or exceed 15 tons per 12 consecutive month period.

#### 2) **Opacity**

Regulation 7.08, section 3.1 establishes opacity standards.

## y. Emission Unit U-KV2-Dryer

# i. **Equipment**

U-KV2-Dryer Emission Points		
Emission	Description	Applicable
Point	-	Regulations
03-280	KV2 Flow Aid Transfer System Bag Dump Station	7.08
03-297	KV2 Storage Tank 750 gal 1988	1.05, 5.00, 5.01, 5.20, 5.21, 5.22, 5.23, 7.12
03-330	KV2 Drying System (Installed prior to Dec 17, 1987); and associated process collector (03-334 and 03-368) associated process safety dust collector (03-350)	1.05, 2.05, 5.00, 5.01, 5.20, 5.21,
03-330	KV2 Drying System (Installed prior to Dec 17, 1987); and associated process collector (03-334 and 03-368) associated process safety dust collector (03-350)	5.22, 5.23, 7.08, 7.25, 40 CFR 64
03-429	KV2 Reclaim Transfer System to Reclaim Transfer Dust Collector	7.08
03-436	KV2 Reclaim System Dump Station	
03-662	KV2 Bulk Packaging Machine	
03-690	KV2 Storage Silo	2.05, 7.08

## ii. Standards/Operating Limits

#### 1) **VOC**

- (a) Per Regulation 7.25 and Construction Permit 160-91-C, VOC emissions from Emission Point 03-330 are limited to being controlled by the thermal oxidizer, except for when the VOC emissions bypass the control device then the VOC emissions are limited to 188 lb/hr and 10.6 tons per 12 consecutive month period. Additionally, Emission Point 03-330, the vent gas stream shall not bypass the thermal oxidizer while feeding emulsion for more than forty-five (45) minutes in any one twenty-four (24) hour day. The twenty-four hour day is the KV-2 day starting at 6:00 a.m. and running to 5:59 a.m.
- (b) Per Regulation 2.05, Emission Point 03-330 is limited to VOC emissions of 10.6 tons per 12 consecutive month period in order to avoid PSD.
- (c) For Emission Points 03-297, Regulation 7.12 requires that the owner or operator not store materials with an as stored vapor pressure of greater than or equal to 1.5 psia.

## 2) **PM**

(a) In accordance with Regulation 7.08, Table 1, PM emission standards for Emission Points 03-260 and

- 03-662 is 2.34 lb/hr each for process throughput of 1000 lb/hr or less.(The District determined on March 13, 2013 that the potential uncontrolled PM emissions cannot exceed the PM emission standard.)
- (b) In accordance with Regulation 7.08, Table 1, PM standard for Emission Points 03-429 and 03-436 is. (The District determined on March 13, 2013 that the potential uncontrolled PM emissions cannot exceed the PM emission standard.)

$$E = 3.59(2.50)^{0.62} = 6.34 \text{ lb/hr}$$

(c) In accordance with Regulation 7.08, Table 1, PM standard for Emission Point 03-330 is. (The District determined on March 13, 2013 that the potential uncontrolled PM emissions cannot exceed the PM emission standard.)

$$E = 3.59(10.00)^{0.62} = 14.97 \text{ lb/hr}$$

(d) In accordance with Regulation 7.08, Table 1, PM standard for Emission Point 03-280 is. (The District determined on March 13, 2013 that the potential uncontrolled PM emissions cannot exceed the PM emission standard.)

$$E = 3.59(0.594)^{0.62} = 2.60 \text{ lb/hr}$$

(e) In accordance with Regulation 7.08, Table 1, PM standard for Emission Point 03-690 is

$$E = 3.59(17.992)^{0.62} = 21.54 \text{ lb/hr}$$

- (f) Per Regulation 2.05, Emission Point 03-690 is limited to PM emissions of less than or equal to 25 tons per 12 consecutive month period in order to avoid PSD.
- (g) Per Regulation 2.05, Emission Point 03-690 is limited to  $PM_{10}$  emissions of less than or equal to 15 tons per 12 consecutive month period in order to avoid PSD.

#### 3) **Opacity**

Regulation 7.08, section 3.1 establishes opacity standards for Emission Points 03-260, 03-280, 03-330, 03-429, 03-436, 03-662, and 03-690.

#### **4) TAC**

Per Regulations 5.00 and 5.21, TAC emissions must not exceed environmentally acceptable levels.

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#### z. Emission Unit U-KV2-Feed

# i. **Equipment**

U-KV2-Feed Emission Points		
Emission	Description	Applicable Regulations
Point		
03-290	KV2 Feed Tank 25,000 gal 1986	
03-291	KV2 Feed Tank 25,000 gal 1986	1.05, 5.00, 5.01, 5.20, 5.21, 5.22,
03-296	KV2 Filter	5.23, 7.25
03-300	KV2 Blend Tank 36,000 gal 1979	
03-308	KV2 Storage Tank 40,000 gal 1977	1.05, 5.00, 5.01, 5.20, 5.21, 5.22,
03-309	KV2 Storage Tank 40,000 gal 1977	5.23, 6.24

# ii. Standards/Operating Limits

## 1) **VOC**

- (a) Per Regulation 7.25, For Emission Points 03-112, 03-210, 02-010, 02-020, 02-030, 02-040, 02-050, 02-060, 02-070, 02-080, 03-134, 05-690, 05-691, 17-166, 03-290, 03-291, 03-296, 03-300, and 09-102, the owner or operator shall limit the VOC emissions to less than 5.0 ton per 12 consecutive month period. (A BACT determination is required to be performed for any future construction/modification subject to Regulation 7.25 for any emissions outside of the 5 tpy limit.)
- (b) Regulation 6.24 limits the pound per hour and pound per day emissions of Class II and Class III solvents for Emission Points 03-308 and 03-309, unless the emissions are reduced by at least 85%.

## 2) **TAC**

Per Regulations 5.00 and 5.21, TAC emissions must not exceed environmentally acceptable levels.

## aa. Emission Unit U-KV2-50#bag

U-KV2-50#bag Emission Points			
<b>Emission Point</b>	Description	Applicable Regulations	
03-616	KV2 Bag Packing Conveyor	7.08	
Bag-03-571	KV2 50# Packaging Machine #2	2.05. 7.09	
Bag-03-572	KV2 50# Packaging Machine #3	2.05, 7.08	

# 1) **PM**

- (a) In accordance with Regulation 7.08, Table 1, PM emission standard for Emission Point 03-616 is 2.34 lb/hr for process throughput of 1000 lb/hr or less.(The District determined on March 13, 2013 that the potential uncontrolled PM emissions cannot exceed the PM emission standard.)
- (b) In accordance with Construction Permit 35996-12-C the PM standard for each Emission Point Bag-03-571, and Bag-03-572 is 12.52 lb/hr.
- (c) Per Regulation 2.05, Emission Points Bag 03-571 and Bag 03-572 combined are limited to PM emissions of less than or equal to 25 tons per 12 consecutive month period in order to avoid PSD.
- (d) Per Regulation 2.05, Emission Points Bag 03-571 and Bag 03-572 combined are limited to  $PM_{10}$  emissions of less than or equal to 15 tons per 12 consecutive month period in order to avoid PSD.

# 2) **Opacity**

Regulation 7.08, section 3.1 establishes opacity standards.

### bb. Emission Unit U-KVPA-Feed

#### i. **Equipment**

U-KVPA-Feed Emission Points			
<b>Emission Point</b>	Description	Applicable Regulations	
05-692	KV1 Storage Tank 25,000 gal 1985	1.05, 5.00, 5.01, 5.20, 5.21, 5.22, 5.23, 7.12	
09-101	KVPA Storage Tank 3,000 gal 1996	1.05, 5.00, 5.01, 5.20, 5.21, 5.22, 5.23, 7.12	
09-100	KVPA Storage Tank 30,000 gal 1996	1.05, 5.00, 5.01, 5.20, 5.21, 5.22, 5.23, 7.02, 7.12	

# ii. Standards/Operating Limits

#### 1) **VOC**

Regulation 7.12 prohibits storage of materials with an as stored vapor pressure of greater than or equal to 1.5 psia in the storage vessels.

# 2) **TAC**

Per Regulations 5.00 and 5.21, TAC emissions must not exceed environmentally acceptable levels.

# cc. Emission Unit U-KVPA-Dry

# i. **Equipment**

U-KVPA-Dry Emission Points			
Emission	Description	Applicable	
Point	Description	Regulations	
09-125	KVPA Drying Chamber with associated dust collector (09-129)	1.05, 2.05, 5.00, 5.01, 5.20, 5.21, 5.22, 5.23, 7.08, 7.25, 40 CFR 64	
09-102	KVPA Filter	1.05, 5.00, 5.01, 5.20, 5.21, 5.22, 5.23, 7.25	

# ii. Standards/Operating Limits

# 1) **VOC**

- (a) Per Regulation 7.25, For Emission Points 03-112, 03-210, 02-010, 02-020, 02-030, 02-040, 02-050, 02-060, 02-070, 02-080, 03-134, 05-690, 05-691, 17-166, 03-290, 03-291, 03-296, 03-300, and 09-102, the owner or operator shall limit the VOC emissions to less than 5.0 ton per 12 consecutive month period. (A BACT determination is required to be performed for any future construction/modification subject to Regulation 7.25 for any emissions outside of the 5 tpy limit.)
- (b) Per Construction Permit 86-95-C the following is required:
  - (i) The KVPA vent gas stream shall not bypass the thermal oxidizer while feeding emulsion for more than forty-five (45) minutes in any one twenty-four (24) hour day.
  - (ii) The vent gas stream shall be burned at a minimum of 1300 °F for a minimum of 0.5 seconds.
  - (iii) The destruction of VOCs shall meet or exceed 98.50% during normal operation or the destruction efficiency demonstrated during the most recent performance test.
  - (iv) The VOC feed rate in the stream to the thermal oxidizer may not exceed 57.86 lb/hr or alternatively, a rate established during a performance test.
- (c) Per Regulations 2.05, 7.25, and Construction Permit 86-95-C, Emission Point 09-125 shall limit VOC

emissions to less than 5.0 lb/hr and 8.0 tons per 12 consecutive month period.

# 2) **PM**

In accordance with Regulation 7.08, Table 1, PM standard for Emission Point 09-125 is:

$$E = 3.59(12.516)^{0.62} = 17.2 \text{ lb/hr}$$

# 3) **Opacity**

Regulation 7.08, section 3.1 establishes opacity standards for Emission Point 09-125.

# 4) **TAC**

Per Regulations 5.00 and 5.21, TAC emissions must not exceed environmentally acceptable levels.

### dd. Emission Unit U-KVPA-Pack

# i. **Equipment**

U-KVPA-Pack Emission Points			
Emission	Description	Applicable Regulations	
Point			
09-231	KVPA Buffer Bin		
09-236	KVPA Rework Hopper and 50#		
09-230	dump stations		
	KVPA 50# Pkg including 50#	2.05	
09-50#	Baggers and various misc pick up	7.08	
	locations on 50# Pkg system		
	KVPA Bulk System including Bulk		
09-Bulk	Bagging Machine and various misc		
	pick up locations in Bulk System		

# ii. Standards/Operating Limits

#### 1) **PM**

(a) In accordance with Regulation 7.08, Table 1, PM standard for each Emission Point (09-231, 09-50#, and 09-Bulk) is:

$$E = 3.59(8.795)^{0.62} = 13.82 \text{ lb/hr}$$

(b) In accordance with Regulation 7.08, Table 1, PM standard for Emission Point 09-236 is:

$$E = 3.59(2.50)^{0.62} = 6.34 \text{ lb/hr}$$

(c) Per Regulation 2.05, Emission Points 09-231, 09-50#, and 09-Bulk combined are limited to PM emissions of less than or equal to 11.5 tons per 12 consecutive month period in order to avoid PSD.

(d) Per Regulation 2.05, Emission Point 09-231, 09-50#, and 09-Bulk combined are limited to PM<sub>10</sub> emissions of less than or equal to 11.5 tons per 12 consecutive month period in order to avoid PSD.

# 2) **Opacity**

Regulation 7.08, section 3.1 establishes opacity standards.

#### ee. Emission Unit U-PLANT-Misc

### i. **Equipment**

U-PLANT-Misc Emission Points			
Emission Point Description Applicable Regulations			
	Vehicle Gasoline Pump Tank	5.00, 5.01, 5.02, 5.20, 5.21, 5.22,	
71202A	1,000 gal 1980	5.23, 6.40, 7.15, 40CFR63 Subpart CCCCCC	

### ii. Standards/Operating Limits

### 1) **VOC**

- (a) Per Regulation 7.15 and 40 CFR 63 Subpart CCCCCC, the owner or operator shall install, maintain, and operate the following devices on the storage tank: submerged fill pipe, vent line restrictions, vapor balance system, and vapor tight connections. In addition, the equipment shall be maintained with no defects and with vapor-tight seals and covers.
- (b) The owner or operator shall not exceed 10,000 gallons of gasoline based upon calculating the average volume of gasoline dispensed per month over the consecutive 12 month period, in order to be exempted from Regulation 6.40, except for the recordkeeping and reporting requirements.

# 2) **TAC**

Per Regulations 5.00 and 5.21, TAC emissions must not exceed environmentally acceptable levels.

# iii. Monitoring and Record Keeping

#### 1) **VOC**

Regulation 6.40 and 40 CFR 63.11116(b) require that the owner or operator shall keep a record of the amount of throughput of gasoline per month to determine compliance with limits.

#### iv. **Reporting**

#### 1) **VOC**

Regulation 6.40 requires that the owner or operator shall submit a report by April 15<sup>th</sup> every year showing that they are still exempt from Regulation 6.40.

# ff. Emission Unit U-UTIL-Steam

# i. **Equipment**

U-UTIL-Steam Emission Points			
Emission Point	Description	Applicable Regulations	
60-100	Boiler #100; 248.1 MM Btu/hr; natural gas, LWDF, and No. 2 fuel oil-fired	2.04, 2.05, 5.00, 5.01, 5.02, 5.20, 5.21, 5.22, 5.23, 6.42, 7.01, 7.02, 7.06, 40 CFR 60 Subpart Db, 40 CFR 63 Subpart EEE	
60-500	Boiler #500; 248.1 MM Btu/hr; natural gas-fired, with No. 2 fuel oil backup	5.00, 5.01, 5.20, 5.21, 5.22, 5.23, 6.42, 7.02, 7.06, 40 CFR 60 Subpart Db	
64-130	Tanker Load Rack	5.00, 5.01, 5.02, 5.20, 5.21,	
64-137	Tank Car Load Rack	5.22, 5.23, 7.22, 40 CFR 63 Subpart DD	
64-140	Fuel Storage Tank 31,900 gal 1943	5.00, 5.01, 5.02, 5.20, 5.21,	
64-141	Fuel Storage Tank 31,900 gal 1943	5.22, 5.23, 6.13, 40 CFR 63 Subpart DD, 40 CFR 63 Subpart OO,	
64-250	Fuel Storage Tank 12,000 gal 1962	40 CFR 61 Subpart V	
64-142	Fuel Storage Tank 7,200 gal 1960	6.13	
CONTNR	Off-site Waste Containers	5.00, 5.01, 5.02, 5.20, 5.21, 5.22, 5.23, 40 CFR 63 Subpart DD, 40 CFR 63 Subpart PP	

# ii. Standards/Operating Limits

# 1) **PM**

(a) In accordance with Regulations 40 CFR 60 Subpart Db and 7.06, section 4.1.4, PM emissions are limited to 0.10 pounds per million BTU actual total heat input for Emission Point 60-100.

$$E = 1.919(248.1)^{-0.535} = 0.10 \text{ lb/mmBTU}$$

- (b) In accordance with Regulation 2.05 and Construction Permit 449-90-C(R2), the source netting out of PSD with a PM emission limit of 108.7 tons per 12 consecutive month limit for Emission Point 60-100.
- (c) In accordance with Regulations 40 CFR 60 Subpart Db and 7.06, section 4.1.2 (total heat capacity greater than 250 mmBTU all boilers installed after 1976

combined), PM emissions are limited to 0.10 pounds per million BTU for Emission Point 60-500.

# 2) **Opacity**

- (a) Regulation 7.06, section 4.2 establishes opacity standards for Emission Points 60-100 and 60-500.
- (b) Regulation 40 CFR 60 Subpart Db establishes opacity standards for Emission Points 60-100 and 60-500.

# $NO_{x}$

- (a) 40 CFR 60 Subpart Db establishes NOx emission limits based on the fuel combusted.
- (b) In accordance with Regulation 2.05 the source netting out of PSD with a NOx emission limit of 453.3 tons per 12 consecutive month limit for Emission Point 60-100.
- (c) The NO<sub>x</sub> RACT Plan establishes NO<sub>x</sub> emission standards on a rolling 30-day average basis for Emission Points 60-100 and 60-500.

# $SO_2$

(a) In accordance with Regulation 7.06, section 5.1.3.1, SO<sub>2</sub> emissions are limited to 0.80 pounds per million BTU actual total heat input for Emission Point 60-100.

$$E = 7.7223(248.1)^{-0.4106} = 0.80 \text{ lb/mmBTU}$$

- (b) In accordance with Regulation 7.06, section 5.1.2, SO<sub>2</sub> emission are limited to 0.8 pounds per million BTU actual total heat input for combustion of gaseous fuels for Emission Point 06-500.
- (c) 40 CFR 60 Subpart Db limits sulfur contents of the fuel oil combusted.
- (d) In accordance with Regulation 2.05 the source netting out of PSD with a SO<sub>2</sub> emission limit of 529.8 tons per 12 consecutive month limit for Emission Point 60-100.

# 5) **VOC**

(a) Regulation 6.13 requires Emission Points 64-140 and 64-141, and 64-250 to be equipped with a permanent submerged fill pipe.

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(b) Per Regulation 6.13, Emission Point 64-142 is limited to storing materials with a vapor pressure of less than 1.5 psia.

- Regulation 7.22 applies to Emission Points 64-130 (c) and 64-137. "Volatile organic material" loading into any tank truck, trailer, or railroad car must be accomplished by submerged fill, bottom loading, or other equivalent methods approved by the District. Volatile organic materials (VOMs) are any volatile organic compounds (VOCs) having a true vapor pressure of 1.5 psia or greater under actual storage conditions. In addition, for Emission Points 64-130 and 64-137 the owner or operator shall not load such materials unless such facility is equipped with a device which reduces the emissions of hydrocarbon vapors and gases by at least 90% by weight, and which is properly installed, in good working order, and in operation.
- (d) In accordance with Regulation 2.05 the source netting out of PSD with a VOC emission limit of 13.0 tons per 12 consecutive month limit for Emission Point 60-100.

# 6) **CO**

See condition number 7(d) below.

# 7) 40 CFR 63 Subpart EEE

- (a) 40 CFR 63 Subpart EEE limits the total LWDF feed rate for Emission Point 06-100 to the maximum amount demonstrated during the most recent testing that has been submitted and approved by the District. (The most recent test, as of the issuance of this permit, was conducted on April 1, 2009 and showed a maximum LWDF feed rate of 14,044 lb/hr.)
- (b) 40 CFR 63 Subpart EEE limits hydrogen chloride and chlorine emissions for Emission Point 60-100 to 31 parts per million by volume, combined emissions, expressed as a chloride (Cl(-)) equivalent, dry basis and corrected to 7 percent oxygen and  $5.1 \times 10^{-2}$  lbs combined emissions of hydrogen chloride and chlorine gas attributable to the hazardous waste per million Btu heat input when hazardous waste with an as-fired heating value less than 10,000 Btu/lb is burned.
- (c) Per 40 CFR 63 Subpart EEE, the owner or operator shall install, maintain, and properly operate an

- automatic waste feed shut down device for Emission Point 60-100.
- (d) 40 CFR 63 Subpart EEE requires that CO emissions from Emission Point 60-100 to be limited to 100 ppmv in the stack gas on an hourly rolling average basis corrected to 7% oxygen dry gas basis when combusting LWDF.
- (e) 40 CFR 63 Subpart EEE prohibits burning of polychlorinated biphenyls, dioxins, and materials manufactured for chemical warfare in Emission Point 60-100.
- (f) 40 CFR 63 Subpart EEE requires that the boiler shall meet a destruction and removal efficiency (DRE) of 99.99% when burning liquid waste derived fuels (LWDF).

#### 8) **HAP**

- (a) 40 CFR 63 Subpart OO requires that Emission Points 64-140, 64-141, and 64-250 be equipped with a fixed roof designed to meet certain specifications, the fixed roof shall be installed with each closure device secured in the closed position, a transfer system that consists of continuous hard-piping shall be used, and the HAP vapor pressure shall be limited to 76.6 kPa (11.11 psia).
- (b) 40 CFR 63 Subpart PP requires that Emission Point CONTNR shall be equipped with covers and closure devices, as applicable to the container, that are composed of suitable materials to minimize exposure of the regulated-material to the atmosphere and to maintain the equipment integrity for as long as it is in service and shall remain closed with certain exceptions.
- (c) 40 CFR 63 Subpart DD requires that a transfer system that consists of continuous hard-piping be used for Emission Points 64-130 and 64-137 and all joints or seams between the pipe sections shall be permanently or semi-permanently sealed (e.g. a welded joint between two sections of metal pipe or a bolted and gasketed flange).

# 9) **TAC**

Per Regulations 5.00 and 5.21, TAC emissions must not exceed environmentally acceptable levels.

# iii. Monitoring and Record Keeping

# 1) **PM**

40 CFR 60 Subpart Db requires that the owner or operator conduct a stack test once per five year permit term on Emission Point 60-500.

# 2) **Opacity**

40 CFR 60 Subpart Db requires that the owner or operator shall keep records of all COMS output for Emission Point 60-100.

### $NO_{x}$

40 CFR 60 Subpart Db requires that the owner or operator maintain records each steam generating unit operating day for Emission Point 60-100 of the average hourly nitrogen oxides emission rates, the 30-day average nitrogen oxides emission rates, identification of when the 30-day average has been exceeded, any modification to the continuous monitoring system, and results of the daily CEMS drift tests and quarterly accuracy assessments.

#### $SO_2$

40 CFR 60 Subpart Db requires that the owner or operator obtain and maintain at the affected facility fuel receipts from the fuel supplier which certify that the oil meets the definition of distillate oil (except for fuel nitrogen content) for Emission Points 60-100 and 60-500.

# 5) 40 CFR 63 Subpart EEE

- (a) 40 CFR 63 Subpart EEE requires that CEMS, continuous recording equipment, and parameter monitors shall be installed, calibrated, tested, and operated according to certain specifications for Emission Point 60-100.
- (b) 40 CFR 63 Subpart EEE requires that the owner or operator shall document compliance with the required DRE efficiency once per five year permit term for Emission Point 60-100.

#### 6) **HAP**

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(a) 40 CFR 63 Subpart OO requires that the fixed roof and its closure devices of Emission Points 64-140, 64-141, and 64-250 be visually inspected for defects at least once every calendar year, the defects shall be repaired, and records must be maintained of the inspections and repairs.

(b) 40 CFR 63 Subpart PP requires that the owner or operator inspect Emission Point CONTNR and its cover and closure devices, repair defects, and maintain records demonstrating the use of level one and level two controls.

### iv. **Reporting**

### $NO_{x}$

40 CFR 60 Subpart Db requires the owner or operator to submit a report on any excursions from the limits and quarterly reports of continuous monitoring data.

# 2) **HAP**

40 CFR 63 Subpart OO requires that the owner or operator report any exceedance of the allowable maximum HAP vapor pressure for an off-site material to be stored in Emission Points 64-140, 64-141, and 64-250.

#### v. **Testing**

# 1) RCRA Testing for Emission Point 60-100

RCRA requires periodic testing. PM testing conducted for RCRA will be submitted or PM performance test will be conducted with 10 years of the last test whichever comes first.

# 2) PM Testing for Emission Point 60-500

A stack test for PM must be conducted on Emission Point 60-500 once per five year permit term to demonstrate compliance with 40 CFR 60.43b(b).

# gg. Emission Unit U-UTIL-WW

# i. **Equipment**

U-UTIL-WW Emission Points			
Emission	Description	Applicable Regulations	
Point			
66-160	Plant Separator	6.43, 7.36	
66-167	Plant WW Surge Tank 515,000 gal 1961	5.00, 5.01, 5.20, 5.21, 5.22, 5.23	

# 1) **VOC**

- (a) Per Regulation 7.36, the owner or operator shall not recover 200 gallons a day or more of any volatile organic compounds from any equipment which processes, refines, stores, or handles hydrocarbons with a Reid vapor pressure of 0.5 psia or greater, unless the emissions of all hydrocarbon vapors and gases are reduced 90% by weight.
- (b) Per Regulation 6.43, the owner or operator shall equip this equipment with a gutter and downspout type weir overflow.

# 2) **TAC**

Per Regulations 5.00 and 5.21, TAC emissions must not exceed environmentally acceptable levels.

# III. Other Requirements

- **1. Temporary Sources:** The source did not request to operate any temporary facilities.
- **2. Short Term Activities:** The source did not report ant short term activities.
- 3. Emissions Trading: N/A
- **4. Operational Flexibility:** The source did not request any operational flexibility for the emission points.

# 5. Compliance History:

Incident Date(s)	Regulations Violated	Result
9/9/92	1.07, 1.09, 1.13	Settled
11/2/92	6.24	Board Order
5/10/93	1.13	Settled
6/30/93	2.03	Settled
9/26/93	1.13	Settled
5/8/98	1.09	Settled
5/12/99	7.02	Settled
9/26/00	6.24	Board Order
12/15/06	1.13	Settled
7/2/08	1.07, 2.16	Board Order
5/29/08	1.07, 2.16	Board Order
4/11/07	1.07, 2.16	Settled
6/13/10	2.16	Board Order
8/30/12	1.07, 2.16	Board Order

# 6. Calculation Methodology:

Rohm and Haas - Louisville Plant uses a variety of methods to estimate air emissions. Most of the emission estimates are based on established calculation

methodologies for common Rohm and Haas processes and emissions-generating activities (previously called SARACALC), which are based on EPA's AP-42. The calculation methods include:

# a. Working losses from tanks.

Working losses are determined by methods based on EPA's AP-42:

### b. **Breathing losses from tanks.**

Breathing losses for all major raw material storage tanks are estimated by using Rohm and Haas Company's SARACALC method 4A or 4B, which are based on Chapter 12, "Storage of Organic Liquids" from the AP-42 version published in September 1992.

# c. Material balances for process vents.

Rohm and Haas applies this method to the vents in KV-2, and the KVP2 pelletizer. In these processes, Rohm and Haas measures the residual VOC content in the wet product following the polymerization step and prior to drying. In some cases, Rohm and Haas measures the residual in the powder product following the drying step. Otherwise, Rohm and Haas assumes the residual VOC's in the powder to be negligible. Rohm and Haas assumes that the difference between the residual VOC's in the wet product and dry product exit the process vent.

### d. **Fugitive losses.**

Fugitive losses due to equipment leaks are monitored plantwide according to Permit 157-97-TV (R1) (Title V), Appendix A. Most components are monitored quarterly (units on a rotating 3-month cycle) using EPA Method 21 of 40 CFR, Appendix A, or at the frequency specified in Appendix A, B, or D. The monitoring results are uploaded to a LeakDAS database, which is then used to calculate emissions using the SOCMI equation set, rectangular calculation method, and no peg value. Fugitive emissions are incorporated in unit totals.

#### e. Stream testing.

Stack tests were performed to determine some control device efficiencies. Stack tests have been conducted for the KV-2 thermal oxidizer, KAC thermal oxidizers (RTO and ATO used for sources plantwide), and for Boiler 100 combustion efficiencies. New for 2009 (performed January 2009) is particulate matter (PM) stack testing at KAC and KVPA. Boiler 100 has a continuous emission monitor for NO<sub>x</sub> and CO. Boiler 500 has a continuous emission monitor for NOx.

#### f. EPA emission factors.

EPA AP-42 factors are used for combustion emissions for all but NOx and CO emissions in Boiler 100.

# g. Vendor control efficiency information.

Vendor control efficiencies are applied to estimates of control equipment inlet loadings to estimate most of the particulate emissions and for flare KVPA thermal oxidizer emission estimates.

# h. Engineering judgement.

Engineering judgement is applied to determine some emissions. The cement industy loading factor is used to estimate particulate emissions coming from our process systems without any performance data (i.e.KV2 and KVP solids handling sources) and entering particulate control equipment.

# 7. Insignificant Activities:

Equipment	Quantity	PTE(tpy)	Reg. Basis
Emergency relief vents, stacks, and ventilating systems (not otherwise regulated)	39	0	Regulation 1.02, Appendix A
Lab ventilating and exhausting systems for nonradioactive materials	11	0.01 VOC	Regulation 1.02, Appendix A
Portable Diesel or Gasoline Storage Tank <500 gal	1	0.005 VOC	Regulation 1.02, Appendix A
Storage Tanks containing fuel or lubricating oils with v.p. <10 mmHg at 20°C	2	0.015 VOC	Regulation 1.02, Appendix A
VOC Storage Tanks 250 gallons or less	2	0.12 VOC	Regulation 1.02, Appendix A
Pressurized VOC Storage Vessels	2	0.035 VOC	Regulation 1.02, Appendix A
Diesel or fuel oil storage tanks that are not used for distribution, sale or resale, and that have less than two times the capacity of the vessel in annual turnover of the fluid contained	4	0.02 VOC	Regulation 1.02, Appendix A
Periodic filter change-outs for non-water-based product	22( approximate number of filters in non-water based service)	0.3 VOC	Regulation 1.02
Whitewater sewer system	2	See Individual units	Regulation 1.02
Whitewater sewer – KVK unit	1	0.35 VOC	Regulation 1.02
Whitewater sewer – Dryers unit	1	0.85 VOC	Regulation 1.02

Equipment	Quantity	PTE(tpy)	Reg. Basis
Process wastewater – KAC unit	1	0.12 VOC	Regulation 1.02
Process wastewater – KVK unit	1	0.11 VOC	Regulation 1.02
Process wastewater – Dryers unit	1	0.92 VOC	Regulation 1.02
KB Transfer System for Tank (14-785) E-KB-03-792 (U-KB-Tanks1)	1	0.008 PM	Regulation 1.02

- 1) Insignificant Activities identified in District Regulation 1.02 Appendix A may be subject to size or production rate disclosure requirements.
- 2) Insignificant Activities identified in District Regulation 1.02 Appendix A shall comply with generally applicable requirements.
- Activities identified in Regulation 1.02, Appendix A, may not require a permit and may be insignificant with regard to application disclosure requirements but may still have generally applicable requirements that continue to apply to the source and must be included in the permit.
- 4) Emissions from Insignificant Activities shall be reported in conjunction with the reporting of annual emissions of the facility as required by the District.
- 5) In lieu of recording annual throughputs and calculating actual annual emissions, the owner or operator may elect to report the pollutant Potential To Emit (PTE) quantity listed in the Insignificant Activities table, as the annual emission for each piece of equipment.
- The Insignificant Activities Table is correct as of the date the permit was proposed for review by U.S. EPA, Region 4.
- 7) The owner or operator shall submit an updated list of Insignificant Activities whenever changes in equipment located at the facility occur that cause changes to the plant wide emissions.

# 8. IA Emission Units with Applicable Regulations

#### a. Emission Unit IA1

### i. **Equipment**

IA1 Emission Points				
Emission Point	Description Applicable Regulations			
PW	Three (3) Cold Solvent Parts Washers with secondary reservoirs	6.18		

#### **VOC**

Per Regulation 6.18, the owner or operator shall install, maintain, and operate the control equipment for Emission Points E38 and E39, shall observe specific operating requirements, and shall not operate a cold cleaner using a solvent with a vapor pressure that exceeds 1.0 mm Hg (0.019 psi) measured at 20°C (68°F).

#### b. Emission Unit IA2

# i. **Equipment**

IA2 Emission Points			
Emission	Description	Applicable	
Point		Regulations	
66-GEN	500 HP propane fired emergency generator		
B97-GEN	Building 97 emergency generator (model KTTA1962, installed 1988, 1.9 MMBtu/hr)		
Bldg2ge	Emergency generator at rear of Building 2 (Cummins, model 4BT3-9-G4, installed 1999, 50 KW-hr)	5.02 40 CEP	
FWpump1	Fire Water Pump (model DDFP-L6FALH8418F, installed 1987, 0.67 MMBtu/hr)	5.02, 40 CFR 63 Subpart ZZZZ	
FWpump2	Fire Water Pump – Detroit Diesel (mode DDFDL6ATLH7107, installed 1990, 0.67 MMBtu/hr)		
FWpump4	Fire Water Pump (installed 1986, 0.67 MMBtu/hr)		

# ii. Standards/Operating Limits

#### **HAP**

- (a) Per 40 CFR 63 Subpart ZZZZ, the owner or operator shall limit the operation of these units to one hundred (100) hours in any calendar year during non-emergency events for the purpose of maintenance checks and readiness testing. The owner or operator may operate the emergency stationary RICE up to fifty (50) hours in any calendar year in non-emergency situations, but those 50 hours are counted towards the 100 hours per year provided for maintenance and testing. There are no time limit for the use in emergency generators.
- (b) Per 40 CFR 63 Subpart ZZZZ, the owner or operator of the emergency generator shall perform maintenance as required in Table 2(d) of Subpart ZZZZ.

# iii. Monitoring and Record keeping

#### **HAP**

- (a) Per 40 CFR 63 Subpart ZZZZ, the owner or operator shall install a non-resettable hour meter if one is not already installed, minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, and has the option of utilizing an oil analysis program in order to extend the specified oil change requirement in Tables 2c and 2d to the subpart.
- (b) Per 40 CFR 63 Subpart ZZZZ, the owner or operator shall keep a copy of each notification and report submitted to comply with the subpart, records of the occurrence and duration of each malfunction of operation, records of performance tests and performance evaluations, records of required maintenance, and actions taken during periods of malfunction to minimize emissions.

# iv. **Reporting**

#### **HAP**

Per 40 CFR 63 Subpart ZZZZ, the owner or operator shall report any failure to perform the management practice on the schedule required and the Federal, State or local law under which the risk was deemed unacceptable.

#### c. Emission Unit IA3

# i. **Equipment**

Emission Point	Description	Applicable Regulation	Basis for Applicability
IA –EG	Emergency diesel generators that installed after July 11, 2005 and manufactured after April 1, 2006, with a maximum engine power less than or equal to 500 HP and located at an area source of HAP.	40 CFR 63, Subpart ZZZZ, 40 CFR 60, Subpart IIII	7.02, 40CFR60 Subpart IIII applies to manufacturers, owner or operators of new stationary compression ignition internal combustion engines.  5.02, 40CFR63 Subpart ZZZZ establishes national emission limitations and operating limitations for HAP emitted from stationary RICE located at major and area sources of HAP emissions.

# 1) Unit Operation

- (a) 40 CFR 60.4202 and 4205 establish emission standards for the owner or operator or manufacturer of the emergency stationary CI ICE.
- (b) 40 CFR 60.4211 establishes unit operation requirements for emergency stationary CI ICE.

# 2) Fuel requirements

40 CFR 60.4207 establishes requirement for nonroad diesel fuel.

# iii. Monitoring and Record Keeping

# 1) Unit Operation

40 CFR 60.4209(a) and 4214(b) establish monitoring and record keeping requirements for emergency stationary CI ICE.

# iv. Reporting

# 1) Unit Operation

40 CFR 60.4214 establish reporting requirements for emergency stationary CI ICE.